INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: November 16, 2009

RE: Carmeuse Lime, Inc. / 089-27040-00112

FROM: Matthew Stuckey, Deputy Branch 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, Suite N 501E, 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:

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(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 impractible 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.

Enclosures
FNTVOP.dot12/3/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Carmeuse Lime, Inc.
1 North Carmeuse Drive
Gary, Indiana 46406

(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 reissuance, 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.

Operation Permit No.: T089-27040-00112	
Issued by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 16, 2009 Expiration Date: November 16, 2014

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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.

Source Address:	1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address:	1 North Carmeuse Drive, Gary, Indiana 46406
General Source Phone Number:	(773) 978-6255
SIC Code:	3274
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Nonattainment for $PM_{2.5}$ standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(f) Processed stone handling operations, identified as EU-50, consisting of three (3) drop points into Stone Tanks 1, 2, and 3, each enclosed within a building; three (3) drop points from the Stone Tanks to a conveyor, each enclosed within a building, and five (5) drop points from the stone belt to Kilns 1-5, each enclosed within a building. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

Lime Processing and Handling

(g) One (1) Lime Grinder Handling System; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6.

(h) 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 (ALG450); exhausting to stack S-8.

(i) 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 (ALG460); exhausting to stack S-7.

(j) 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 pugmill scrubber CE-19; exhausting to stacks S-19.

(k) 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 pugmill scrubber CE-20; exhausting to stack S-20.

(l) One (1) Lime Handling System #1 (302 Belt); identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(m) One (1) Lime Handling System #2 (301 Belt); identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15 (ALG300); exhausting to stack S-15.

(n) One (1) Lime Transfer System #1, identified as EU-40/41, approved for construction in 2006, with a maximum capacity of 55 tons of lime per hour, consisting of a hopper, piping and storage tank T4, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-40 (ALG-490) and S-41 (ALG-430), respectively.

(o) One (1) Lime Transfer System #2, identified as EU-42/43, approved for construction in 2006, with a maximum capacity of 80 tons of lime per hour, consisting of a hopper, piping and storage tank T1A, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-42 (ALG-470) and S-43 (ALG-410), respectively.

Lime Storage and Loadout

(p) One (1) Lime Storage System (New Side); identified as EU-24; constructed prior to 1977; consisting of five (5) lime storage tanks; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of eight (8) lime storage tanks; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6; and baghouse CE-13 (ALG320) exhausting to stack S-13.

(r) One (1) Lime Loadout #2A (Center Bay); identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(s) 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 (AKG450); exhausting to stack S-9.

(t) 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 (AKG141); exhausting to stack S-10.

(u) One (1) Lime Loadout #2B (Center Bay); identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(v) One (1) Lime Loadout #1 (West Bay); identified as EU-11; constructed prior to 1977; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(w) One (1) Lime Loadout #2 (East Bay); identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(x) 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 (ALG606CA); exhausting to stack S-32.

Raw Material and Lime Storage and Handling (Fugitive)

(y) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions.

(z) 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.

(aa) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions.

(bb) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge or boat unloading and assorted conveyors; a source of fugitive emissions.

(cc) One (1) Kiln 1 exhaust dust chamber, identified as EU-44, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(dd) One (1) Kiln 2 exhaust dust chamber, identified as EU-45, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(ee) One (1) Kiln 3 exhaust dust chamber, identified as EU-46, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(ff) One (1) Kiln 4 exhaust dust chamber, identified as EU-47, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(gg) One (1) Kiln 5 exhaust dust chamber, identified as EU-48, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(hh) One (1) lime dust storage pile, identified as EU-49, with a capacity of 18,000 tons; 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 6.8-10];

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Five (5) furnaces, four (4) rated at 0.12 MMBtu per hour and one (1) rated at 0.075 MMBtu per hour, for providing space heat [326 IAC 6.8-1-2(a)];

(c) Two (2) diesel fuel storage tanks, one (1) 10,000 gallon stationary tank and one (1) 300 gallon portable tank, both installed prior to 2001, handling less than or equal to three thousand five hundred (3,500) gallons, each with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)];

(d) One (1) 300 gallon gasoline storage tank, installed prior to 2007, handling less than or equal to one thousand three hundred (1,300) gallons, with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)]; and

(f) One (1) parts washer without a remote solvent reservoir, installed September 2008, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38^0C) [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8].

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][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T089-27040-00112, 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 of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal 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.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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.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, within a reasonable time, any information that IDEM, OAQ 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 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 the "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. One (1) certification may cover multiple forms in one (1) submittal.

(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. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 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 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 maintain and implement Preventive Maintenance Plans (PMPs) 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ 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 PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) 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 that 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, and 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;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267.

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ 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 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. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by an "authorized individual" need only be referenced by the date of the original 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 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, 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, 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, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T089-27040-00112 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 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.15 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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.16 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 Operating 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 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 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 at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) 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 on or before the date it is due.

(c) 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 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 any additional information identified as being needed to process the application.

B.18 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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)]

B.19 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.20 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 limitations provided in 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

Such records shall consist of all information required to be submitted to IDEM, OAQ 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 emissions increases and decreases at 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.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

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

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 and/or 326 IAC 2-3.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][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, 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.23 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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.24 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 the applicable fee is due April 1 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, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

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.

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.

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 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (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) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

(g) There shall be a zero (0) percent frequency of visible emission observations of a material during the in-plant transportation of material by truck or rail at any time. Material transported by truck or

rail that is enclosed and covered shall be considered in compliance with the in-plant transportation requirement.

(h) 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%).

(i) 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.

(j) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(k) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(l) Any facility or operation not specified in 326 IAC 6.8-10-3 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 attached Fugitive Dust Control Plan.

C.6 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), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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 14-10-1, 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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial startup, if specified in Section D of this approval.

(b) Compliance testing on existing emission units shall be conducted in accordance with the provisions of this permit.

(c) All compliance 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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).

(d) 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).

(e) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ 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.9 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.10 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 or ninety (90) days of initial start-up, whichever is later. 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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.11 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8)]

(a) The Permittee has submitted its Continuous Compliance Plan (CCP). Pursuant to 326 IAC 6.8-8-1, the Permittee shall maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

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 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the 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 maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ 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 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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 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) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year.

The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(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
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(c) 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 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] [326 IAC 2-2][326 IAC 2-3]

(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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner 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 or ninety (90) days of initial start-up, whichever is later.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr) (2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

(a) The Permittee 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 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) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(f) Processed stone handling operations, identified as EU-50, consisting of three (3) drop points into Stone Tanks 1, 2, and 3, each enclosed within a building; three (3) drop points from the Stone Tanks to a conveyor, each enclosed within a building, and five (5) drop points from the stone belt to Kilns 1-5, each enclosed within a building. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

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

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

D.1.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-22][326 IAC 6.8-8]

(a) Pursuant to 326 IAC 6.8-2-22, the facilities listed in the chart below shall not exceed the respective PM_{10} emission limits:

Facility (as listed in 326 IAC 6.8-2-22)	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 6.8-8, the Permittee shall implement the maintenance and inspection practices outlined in the Continuous Compliance Plan (CCP), dated March 1997.

D.1.2 Lake County SO_2 Emission Limitations [326 IAC 7-4.1-6]

(a) Pursuant to 326 IAC 7-4.1-6, Carmeuse Lime shall comply with the sulfur dioxide (SO_2) emission limits for Rotary Kilns EU-1 through EU-5 as follows:

(1) When three (3) or fewer kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and
(B) forty-eight (48) pounds per hour per operating kiln.

(2) When four (4) kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and
(B) forty (40) pounds per hour per operating kiln.

(3) When five (5) kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and
(B) thirty-four (34) pounds per hour per operating kiln.

(4) The production of lime is not to exceed five hundred fifty (550) tons per day for each rotary kiln.

(b) Sulfur dioxide emissions shall be vented from the kilns/kiln gas filter systems at the following heights above grade:

(1) For Kiln No. 1, a stack height of seventy-nine and one-tenth (79.1) feet.
(2) For Kiln No. 2, a stack height of eighty-five and nine-tenths (85.9) feet.
(3) For Kiln No. 3, a stack height of eighty-six and zero-tenths (86.0) feet.
(4) For Kiln No. 4, a stack height of ninety-four and four-tenths (94.4) feet.
(5) For Kiln No. 5, a stack height of eighty-seven and four-tenths (87.4) feet.

D.1.3 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 821,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The VOC emissions from each kiln shall not exceed 0.06 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.1.4 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 rotary kilns EU-1 through EU-5 and their control devices.

Compliance Determination Requirements

D.1.5 Particulate Control

(a) In order to comply with Condition D.1.1, 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.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for 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 2-1.1-11] 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.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) No later than thirty (30) months following the last valid compliance demonstration, the Permittee shall perform PM_{10} and SO_2 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 6.8-2-22 and 326 IAC 7-4.1-6. These tests shall be repeated at least once every thirty (30) months from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) No later than thirty (30) months following the last valid compliance demonstration, the Permittee shall perform PM_{10} and SO_2 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 6.8-2-22 and 326 IAC 7-4.1-6 and shall be repeated at least once every thirty (30) months from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) 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 (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.7 SO_2 Emissions [326 IAC 7-4.1-2][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4.1-2 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO_2 limits in Condition D.1.2 using one of the following options:

(a) Sampling, Analysis, and Calculations.

(1) Each shipment of limestone and coal is sampled and analyzed by an independent laboratory, utilizing American Society for Testing and Materials (ASTM) standards for sampling and chemical analyzes. The certified analyses that accompany each shipment shall be the source of the data of the sulfur content in both the limestone and coal. Pursuant to 326 IAC 7-4.1-2(c), the current sampling and analysis protocol to be used in lieu of certified analyses is as follows:

(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 SO_2 scrubbing factor for each kiln as follows:

Scrubbing Factor = [1- ($SO_{2,stack\ test}$/{[%S $_{limestone}$ x Usage $_{limestone}$ / 100 + %S $_{coal}$ x Usage $_{coal}$ / 100] x 2 x 2000})] / 100

where,

%S = weight percent sulfur in either coal or limestone inputs during the most recent stack test
Coal usage = average coal input to kilns during the most recent stack test (tons/hr)
Limestone usage = average limestone input to kilns during the most recent stack test (tons/hr)

The Permittee shall recalculate the scrubbing factor within ninety (90) days after receiving the results of each new kiln performance test for SO_2.

(3) The Permittee shall determine the calendar month SO_2 emissions from each kiln for the quarterly report by the following calculation using the input values determined in D.1.7(a)(1) and D.1.7(a)(2) above:

SO_2 Emissions (lb/hr) = {[(%S $_{limestone}$ x Daily Usage $_{limestone}$) + (%S $_{coal}$ x Daily Usage $_{coal}$)/100] (1-Scrubbing Factor/100) x 2 x 2000}/ 24

where,

%S = daily average weight percent sulfur in either coal or limestone
Daily Usage Limestone = average daily limestone input to kiln (tons/day)
Daily Usage Coal = average daily coal input to kiln (tons/day)

(b) Pursuant to 326 IAC 7-4.1-2(d), 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. IDEM, OAQ may also require that the Permittee conduct a stack test at any emissions unit within sixty (60) days of written notification by the department.

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

D.1.8 Opacity Monitoring / Visible Emission Monitoring [326 IAC 6.8-8-5]

(a) Pursuant to 326 IAC 6.8-8-5(1), 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).

(1) 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 day during normal daylight operations. Readings shall be taken for a minimum of thirty (30) minutes during each day.

(2) If opacity readings are greater than seventy-five percent (75%) of the applicable standard, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances 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 day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(1) 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.

(2) 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.

(3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.9 Monitoring for Baghouses

(a) The Permittee shall record the pressure drop across the baghouses, used in conjunction with rotary kilns EU-1 through EU-5, at least once per day 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 1.0 and 7.0 inches of water, or a range established during the last stack test the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) The instrument used for determining the pressure shall comply with Section C - 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.1.10 Baghouse Inspections [326 IAC 6.8-8-7]

The Permittee shall perform the baghouse inspections pursuant to the Continuous Compliance Plan (CCP) and 326 IAC 6.8-8-7(1). The inspections shall be performed at least once per calendar quarter. Inspections required by this condition shall be not be performed in consecutive months. All defective bags shall be replaced.

D.1.11 Broken or Failed Bag Detection

(a) For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in

the emissions unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.12 Record Keeping Requirements

(a) To document compliance with Condition D.1.3, 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.1.7, the Permittee shall maintain records of the sampling and analysis of raw materials and solid fuel and the equations used to demonstrate compliance with Condition D.1.2.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of:

(1) All opacity measurements of the lime kiln stack exhausts (S-1 through S-5), evaluations, calibration checks, adjustments, and maintenance performed on the continuous monitoring system; or

(2) The daily visible emission notations of the lime kiln stack exhausts (S-1 through S-5), as required by Condition D.1.8. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of opacity measurement or visible emission notation, (i.e. the process did not operate that day).

(d) To document compliance with Condition D.1.9, the Permittee shall maintain a daily record of the pressure drop across the baghouses used in conjunction with kilns EU-1 through EU-5, as required by Condition D.1.9. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(e) To document compliance with Condition D.1.10, the Permittee shall maintain at the source a copy of the Continuous Compliance Plan (CCP) and perform the inspections, monitoring and record keeping requirements in accordance with the Permittee's CCP.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.1.3 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.1.7 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Lime Processing and Handling

(g) One (1) Lime Grinder Handling System; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6.

(h) 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 (ALG450); exhausting to stack S-8.

(i) 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 (ALG460); exhausting to stack S-7.

(j) 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 pugmill scrubber CE-19; exhausting to stacks S-19.

(k) 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 pugmill scrubber CE-20; exhausting to stack S-20.

(l) One (1) Lime Handling System #1 (302 Belt); identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(m) One (1) Lime Handling System #2 (301 Belt); identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15 (ALG300); exhausting to stack S-15.

(n) One (1) Lime Transfer System #1, identified as EU-40/41, approved for construction in 2006, with a maximum capacity of 55 tons of lime per hour, consisting of a hopper, piping and storage tank T4, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-40 (ALG-490) and S-41 (ALG-430), respectively.

(o) One (1) Lime Transfer System #2, identified as EU-42/43, approved for construction in 2006, with a maximum capacity of 80 tons of lime per hour, consisting of a hopper, piping and storage tank T1A, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-42 (ALG-470) and S-43 (ALG-410), respectively.

Lime Storage and Loadout

(p) One (1) Lime Storage System (New Side); identified as EU-24; constructed prior to 1977; consisting of five (5) lime storage tanks; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of eight (8) lime storage tanks; emissions controlled by baghouses CE-6 (ALG400) and CE-13 (ALG320); exhausting to stack S-6 and stack S-13.

(r) One (1) Lime Loadout #2A (Center Bay); identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(s) 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 (AKG450); exhausting to stack S-9.

(t) 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 (AKG141); exhausting to stack S-10.

(u) One (1) Lime Loadout #2B (Center Bay); identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(v) One (1) Lime Loadout #1(West Bay); identified as EU-11; constructed prior to 1977; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(w) One (1) Lime Loadout #3 (East Bay); identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(x) 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 (ALG606CA); exhausting to stack S-32.

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

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

D.2.1 Prevention of Significant Deterioration (PSD) and Emission Offset (EO) - Particulate [326 IAC 2-2] [326 IAC 2-3]

(a) Pursuant to 089-6140-00112, issued June 29, 2004:

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

(2) The PM emissions from pugmill EU-19 shall not exceed 0.186 pounds per ton of lime processed.

(3) 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.

(b) Pursuant to CP 089-5851-00112, issued December 9, 1996, the PM/PM_{10} emissions from Lime Loadout #3 (East Bay) (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.

(c) Pursuant to MSM 089-23502-00112, issued on November 17, 2006:

(1) The PM emission rate from the lime transfer system, identified as EU-40, controlled by a bin vent filter and exhausting to stack S-40 (ALG-490), shall not exceed 0.05 pounds per hour.

(2) The PM_{10} emission rate from the lime transfer system, identified as EU-40, controlled by a bin vent filter and exhausting to stack S-40 (ALG-490), shall not exceed 0.05 pounds per hour.

(3) The PM emission rate from the lime transfer system, identified as EU-41 controlled by a bin vent filter and exhausting to stack S-41 (ALG-430), shall not exceed 1.27 pounds per hour.

(4) The PM_{10} emission rate from the lime transfer system, identified as EU-41, controlled by a bin vent filter and exhausting to stack S-41 (ALG-430), shall not exceed 1.27 pounds per hour.

(5) The PM emission rate from the lime transfer system, identified as EU-42 controlled by a bin vent filter and exhausting to stack S-42 (ALG-470), shall not exceed 0.05 pounds per hour.

(6) The PM_{10} emission rate from the lime transfer system, identified as EU-42, controlled by a bin vent filter and exhausting to stack S-42 (ALG-470), shall not exceed 0.05 pounds per hour.

(7) The PM emission rate from the lime transfer system, identified as EU-43 controlled by a bin vent filter and exhausting to stack S-43 (ALG-410), shall not exceed 1.27 pounds per hour.

(8) The PM_{10} emission rate from the lime transfer system, identified as EU-43, controlled by a bin vent filter and exhausting to stack S-43 (ALG-410), shall not exceed 1.27 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from the modification performed under MSM 089-23502-00112, issued on November 17, 2006, is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM_{10} per year and therefore will render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable to this source.

D.2.2 Particulate Matter Emissions [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate matter emissions from the Lime Loadout #3 (East Bay)(EU-25), Pugmill #1 (EU-18), Pugmill #2 (EU-19), Lime Loadout #3 (East Bay), Lime Transfer Systems (EU-40, EU-41, EU-42, and EU-43), and Truck Transfer Station Reclaim Hopper (EU-32) shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.2.3 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-22][326 IAC 6.8-8]

(a) Pursuant to 326 IAC 6.8-2-22, the facilities listed in the chart below shall not exceed the respective PM_{10} emission limits:

Facility (as listed in 326 IAC 6.8-2-22)	Emission Unit(s) ID	Control Device ID	PM_{10} Emission Limits	
			(lbs/ton)	(lbs/hr)
Flue dust loadout number 1 (MHL 14)	EU-17	CE-10 AKG 141	0.003	0.110
Flue dust loadout number 2 (MHL 15)	EU-16	CE-9 AKG 450	0.003	0.100
Lime Grinder (MHL 13)	EU-15 EU-14	CE-6 ALG 400	0.015	0.44
Lime handling baghouse number 1 (MHL 6)	EU-6 EU-24	CE-14 ALG 310	0.002	0.260
Lime handling baghouse number 2 (MHL 7)	EU-7	CE-15 ALG 300	0.002	0.180
Lime handling baghouse number 4 (MHL 9)	EU-11 EU-25	CE-25 ALG 600	0.001	0.13
Lime loadout baghouse number 3 (MHL 12)	EU-8 EU-28	CE-13 ALG 320	0.004	0.410
Lime loadout baghouse number 1 (MHL 10)	EU-12	CE-7 ALG 460	0.0004	0.050
Lime loadout baghouse number 2 (MHL 11)	EU-13	CE-8 ALG 450	0.0004	0.050

(b) Pursuant to 326 IAC 6.8-8, the Permittee shall implement the maintenance and inspection practices outlined in the current Continuous Compliance Plan (CCP).

D.2.4 Preventative 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.2.5 Particulate Control

(a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the baghouses, scrubbers, and bin vent filters 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.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for 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 unit 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.

D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) The Permittee shall perform PM_{10} testing on the Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (New Side)(EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Lime Loadout #1 (EU-11) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6.8-2-22 and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) The Permittee shall perform PM_{10} testing on the Lime Grinder (EU-15), Lime Storage System (Old Side)(EU-14), Lime Handling System #2 (EU-7), and the Lime Loadout #2 (EU-8) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6.8-2-22 and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.2.7 Visible Emissions Notations [40CFR 64]

(a) Visible emission notations of the stack exhaust from facilities 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, EU-32, EU-41 and EU-43 shall be performed once per day 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.8 Monitoring for Baghouses

(a) The Permittee shall record the pressure drop across the baghouses, used in conjunction with facilities 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 day 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, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) The instrument used for determining the pressure shall comply with Section C- Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six months.

D.2.9 Baghouse Inspections [326 IAC 6.8-8-7]

The Permittee shall inspect the baghouses listed in Condition D.2.3 and 326 IAC 6.8-2-22 pursuant to the CCP and 326 IAC 6.8-8-7. The inspections shall be performed at least once per calendar quarter. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.2.10 Broken or Failed Bag Detection

(a) For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. 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).

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.11 Monitoring for Wet Scrubbers

The Permittee shall monitor and record the pressure drop and flow rate of the wet scrubbers (CE-19 and CE-20) controlling the Pugmills (EU-18 and EU-19) at least once per day when the associated process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 1.5 and 6.5 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. When for any one reading, the flow rate of any of the scrubbers is less than the minimum of 7.0 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instruments used for determining the pressure drop and flow rate shall comply with Section C - 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.2.12 Scrubber Malfunction Detection

In the event that a scrubber malfunction has been observed, 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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.2.13 Record Keeping Requirements

(a) To document compliance with Condition D.2.1(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.2.7, the Permittee shall maintain a daily record of the visible emission notations of the stack exhaust from facilities 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, EU-32, EU-41 and EU-43, as required by Condition D.2.7. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(c) To document compliance with Condition D.2.8, the Permittee shall maintain a daily record of the pressure drop across the baghouses controlling facilities 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, as required by Condition D.2.8. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(d) To document compliance with Condition D.2.9, the Permittee shall maintain records of the results of the inspections.

(e) To document compliance with Condition D.2.11, the Permittee shall maintain a daily record of the pressure drop and flow rate of the wet scrubbers (CE-19 and CE-20) controlling the Pugmills (EU-18 and EU-19), as required by Condition D.2.11. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Raw Material and Lime Storage and Handling (Fugitive)

(y) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions;

(z) 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;

(aa) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions;

(bb) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge or boat unloading and assorted conveyors; a source of fugitive emissions.

(cc) One (1) Kiln 1 exhaust dust chamber, identified as EU-44, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions;

(dd) One (1) Kiln 2 exhaust dust chamber, identified as EU-45, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions;

(ee) One (1) Kiln 3 exhaust dust chamber, identified as EU-46, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions;

(ff) One (1) Kiln 4 exhaust dust chamber, identified as EU-47, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions;

(gg) One (1) Kiln 5 exhaust dust chamber, identified as EU-48, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions; and

(hh) One (1) lime dust storage pile, identified as EU-49, with a capacity of 18,000 tons; 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 6.8-10];

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Five (5) furnaces, four (4) rated at 0.12 MMBtu per hour and one (1) rated at 0.075 MMBtu per hour, for providing space heat [326 IAC 6.8-1-2(a)];

(c) Two (2) diesel fuel storage tanks, one (1) 10,000 gallon stationary tank and one (1) 300 gallon portable tank, both installed prior to 2001, handling less than or equal to three thousand five hundred (3,500) gallons, each with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)];

(d) One (1) 300 gallon gasoline storage tank, installed prior to 2007, handling less than or equal to one thousand three hundred (1,300) gallons, with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)]; and

(e) One (1) parts washer without a remote solvent reservoir, installed September 2008, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38^0C) [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8].

To the extent that any of the above listed operations, or any part of the above listed operations, are processed stone handling (PSH) operations, as defined in 40 CFR 63.7082(g) and 40 CFR 63.7143, then under 40 CFR Part 63, Subpart AAAAA, these facilities are considered an existing affected facility.

(The information describing the process contained in this emissions unit 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 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a), the PM emissions from the five (5) insignificant space heaters shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.3.2 Lake County Fugitive Particulate Matter Emission Limitations [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3:

(a) For paved roads and parking lots, the average instantaneous opacity of the fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of the fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of the fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of the 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 the fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

(f) The opacity of the fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(g) There shall be zero percent (0%) frequency of visible emissions observations of a material during the in-plant transportation of material by truck or rail at any time.

(h) The opacity of the fugitive particulate emissions from in-plant transportation by front end loaders and skip hoists shall not exceed ten percent (10%).

(i) The PM_{10} stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot and ten percent (10%) opacity. The opacity of fugitive particulate emissions from a material processing facility, except crusher at which a capture system is not used, shall not exceed ten percent (10%). The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%). There shall be a zero percent (0%) frequency of visible emission observations from a building enclosing all or a part of the material processing equipment except from a vent in the building. The PM_{10} 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 the fugitive particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) 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).

D.3.4 Volatile Organic Compounds [326 IAC 8-3-2] [326 IAC 8-3-5][326 IAC 8-3-8]

The degreasing operation shall comply with the following requirements:

(a) Pursuant to 326 IAC 8-3-2, the owner or operator shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the cleaner;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label summarizing the operation requirements; and

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(b) Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one hand if:

(A) The solvent volatility is greater than three-tenths (0.3) pounds per square inch (15 millimeters of mercury) measured at 38 degrees Celsius (100 degrees Fahrenheit);

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit

($120^{O}F$)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(c) Pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

(d) Pursuant to 326 IAC 8-3-8, users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components, shall ensure that the following operating requirements are met:

(1) On and after November 1, 1999, no person shall do the following:

(A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty degrees Celsius ($20^{0}C$) (sixty-eight degrees Fahrenheit ($68^{0}C$)) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

(B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty degrees Celsius ($20^{0}C$)(sixty-eight degrees Fahrenheit ($68^{0}C$)).

(2) On and after May 1, 2001, no person shall do the following:

(A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty degrees Celsius ($20^{0}C$) (sixty-eight degrees Fahrenheit ($68^{0}C$)) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

(B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty degrees Celsius ($20^{0}C$) (sixty-eight degrees Fahrenheit ($68^{0}C$)).

(3) On and after November 1, 1999, the following record keeping requirements shall be followed:

(A) All persons subject to (d)(1)(A) and (d)(2)(A) above shall maintain all of

the following records for each sale:

(i) The name and address of the solvent purchaser.
(ii) The date of sale.
(iii) The type of solvent.
(iv) The volume of each unit of solvent sold.
(v) The total volume of the solvent.
(vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty degrees Celsius (20^0C) (sixty-eight degrees Fahrenheit (68^0C)).

(B) All persons subject to the requirements of subsection (d)(1)(B) and (d)(2)(B) above shall maintain each of the following records for each purchase:

(i) The name and address of the solvent supplier.
(ii) The date of purchase.
(iii) The type of solvent.
(iv) The volume of each unit of solvent.
(v) The total volume of the solvent.
(vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty degrees Celsius (20^0C) (sixty-eight degrees Fahrenheit (68^0C)).

(4) All records required by subsection (3) above shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

Compliance Determination Requirements

D.3.5 Particulate Matter (PM)

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Emission Limitations), 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
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.

(c) Batch Transfer into or out of Storage Piles
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.

When adequate wetting of the material for fugitive particulate emissions control is prohibitive to further material processing or reuse, the opacity shall not exceed ten percent (10%), for three (3) minute average. This includes material transfer to the initial hopper of a material processing facility as defined in section 2 of this rule or material transfer for transportation within or outside the source property including, but not limited to, the transfer of coal from a storage pile to a front end loader and from a front end loader to the initial hopper. Compliance with any operation lasting less than three (3) minutes shall be determined as an average of consecutive observations recorded at fifteen (15) second intervals for the duration of the operation.

(d) Continuous Transfer into or out of Storage Piles
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) 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 is 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) Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

(g) In-Plant Material Transportation by Truck or Rail
Compliance with the visible emission limitations for the in-plant transportation of material by truck or rail, 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 in-plant transportation requirement.

(h) In-Plant Material Transportation 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) Buildings Enclosing All or Part of the Material Processing Equipment
Compliance with the visible emissions limitations from buildings enclosing all or part of the material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22.

(j) Building Vents
Compliance with the concentration standard shall be determined using 40 CFR 60, Appendix A, Method 5 or 17. Opacity shall be determined by 40 CFR 60, Appendix A, Method F.

(k) Dust Handling Equipment
Opacity shall be determined by 40 CFR 60, Appendix A, Method 9.

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

D.3.6 Record Keeping Requirements

(a) Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Emission Limitations), 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 paragraph (2) above, 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) Pursuant to 326 IAC 8-9-6 (b)(Volatile Organic Compound Emission Limits), the Permittee shall maintain records and submit to IDEM, OAQ a report of the vessel identification number, the vessel dimensions, and the vessel capacity for the two (2) insignificant diesel storage tanks and the one (1) insignificant gasoline storage tank.

(c) Pursuant to 326 IAC 8-9-6 (a)(Volatile Organic Compound Emission Limits), the records required by 326 IAC 8-9-6 (b) shall be maintained for the life of the vessel.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.7 Reporting Requirements

(a) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Emission Limitations), a quarterly report shall be submitted, stating the following:

(1) The dates any required control measures, as specified in the Fugitive Dust Plan included as Appendix A, 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.

SECTION E.1 NESHAP Subpart AAAAA

Emissions Unit Description:

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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(f) Processed stone handling (PSH) operations, identified as EU-50, consisting of three (3) drop points into Stone Tanks 1, 2, and 3, each enclosed within a building; three (3) drop points from the Stone Tanks to a conveyor, each enclosed within a building, and five (5) drop points from the stone belt to Kilns 1-5, each enclosed within a building. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

The affected facilities under 40 CFR 63, Subpart AAAAA are the five (5) rotary kilns (EU-1 through EU-5) and all processed stone handling (PSH) operations (EU-50), including all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. Affected PSH operations include man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors.

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

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants AAAAA [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1, the Permittee shall comply with the provisions of 40 CFR Part 63 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the kilns, identified as EU1 - 5, and the processed stone handling operations, identified as EU-50,

except as otherwise specified in 40 CFR Part 63, Subpart AAAAA.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Lime Manufacturing Plants NESHAP [40 CFR 63, Subpart AAAAA][326 IAC 20-91]

Pursuant to 40 CFR Part 63, Subpart AAAAA, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart AAAAA, National Emission Standards for Lime Manufacturing Plants (included as Attachment A to this permit), for the kilns, identified as EU1 - 5, and the affected processed stone handling operations, identified as EU-50, as follows:

40 CFR 63.7081
40 CFR 63.7082
40 CFR 63.7083(a)(1),(b), (d)
40 CFR 63.7090
40 CFR 63.7100
40 CFR 63.7110(a), (d), (e)
40 CFR 63.7111
40 CFR 63.7112
40 CFR 63.7113
40 CFR 63.7114
40 CFR 63.7120
40 CFR 63.7121
40 CFR 63.7130
40 CFR 63.7131
40 CFR 63.7132
40 CFR 63.7133
40 CFR 63.7140
40 CFR 63.7141
40 CFR 63.7143
40 CFR 63, Subpart AAAAA, Tables 1 - 7

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112

This form consists of 2 pages **Page 1 of 2**

☐ 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 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), 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

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
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 and Enforcement Branch

Part 70 Quarterly Report

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112
Facility: Rotary Kilns#1- 5 (EU-1 through EU-5)
Parameter: Sulfur Dioxide (SO_2) Emissions
Limit: forty-eight (48) pounds per hour per operating kiln when three (3) or fewer kilns are in operation at the same time;
forty (40) pounds per hour per operating kiln when four (4) kilns are in operation at the same time;
thirty-four (34) pounds per hour per operating kiln when four (5) kilns are in operation at the same time.

	Month_____					Month_____					Month_____				
	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)
Kiln Scrubbing Factor (KSF)															
Date of Stack Test for KSF															
Average S Content of Limestone (wt%S)															
Average Throughput of Limestone (tons)															
Average S Content of Coal (wt%S)															
Average Throughput of Coal (tons)															
Average SO_2 Emissions (lb/hr)															
	Monthly Average SO_2 Emissions (lb/hr)_____					Monthly Average SO_2 Emissions (lb/hr)_____					Monthly Average SO_2 Emissions (lb/hr)_____				

☐ No deviation occurred this quarter
☐ Deviation/s occurred this quarter. Deviation has been reported on: _____
Submitted by: _____ Signature:_____
Title/position: _____ Date:_____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112
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 821,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

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

☐ No deviation occurred in this quarter.

☐ 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 and Enforcement Branch

Part 70 Quarterly Report

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112
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 (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

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

☐ No deviation occurred in this quarter.

☐ 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 and Enforcement Branch
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112

Months: _____ to Year: _____

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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does 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".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
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:	
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.

Appendix A: Fugitive Dust Plan

Carmeuse Lime, Inc.
1 North Carmeuse Drive
Gary, Indiana 46406

1.0 IMPLEMENTATION

1.1 All procedures described in this document will be implemented as defined within 326 IAC 6.8-10-4. 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, included at the end of the fugitive dust plan, or a similar record containing the information contained thereon will be completed under the supervision of the General Foreman.

2.0 COMPLIANCE DETERMINATION

2.1 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.

2.2 Review of record keeping information.

2.3 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.

3.0 FACILITY DESCRIPTION

The Buffington plant utilizes limestone as a feedstock which is fired in rotary kilns to produce lime products.

4.0 LOADING or UNLOADING of OPEN STOCKPILES and BULK MATERIALS

4.1 Transportation of Bulk Materials

4.1.1 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.

4.1.2 Kiln Fuel (solid)

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.

4.2 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 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.

4.3 Outdoor Conveying

Material flow diagrams identifying existing control equipment for all processing lines are shown in Appendices D, E, F, and G.

4.3.1 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.

4.3.2 Lime

Transfer of lime product is by covered conveyor systems. Conveyor transfer points control particulate fugitive emissions via dust collectors.

4.3.3 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.

4.3.4 Kiln Fuel (solid)

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.

4.4 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).

4.4.1 Listing of Roadway Segments (All distances are approximate):

4.4.1.1 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.

4.4.1.2 Plant Loop Segment – One thousand seven hundred forty (1,740) feet long and twenty-five (25) feet wide, including the roadway route under the west product loadout area.

4.4.1.3 Under Kiln Segment – Two hundred fifty (250) feet long and twenty-five (25) feet wide.

4.4.1.4 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.

4.4.1.5 Service Building Parking Lot Segment – One hundred seventy (170) feet long and forty two (42) feet wide.

4.4.1.6 East Product Loadout Segment – Four hundred eighty (480) feet long and twenty (20) feet wide.

4.4.1.7 Center Bay Loadout Segment – One hundred twenty (120) feet

long and twenty (20) feet wide.

4.4.2 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	1,095	1,083
-	Employee Vehicles	24,455	3,000

4.4.3 Control Action -The active paved roadways will be watered and/or swept as needed except as specified in AP-42 (Chapter 13.2.2) on those days when precipitation exceeds 0.1 inch, or on those days when the ambient temperature is at or below the freezing point (32^0F).

4.5 Unpaved Roads

4.5.1 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.

4.5.2 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.

4.5.3 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.

4.5.4 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 the ambient temperature is at or below the freezing point (32^0F).

4.6 Unpaved Plant Areas

4.6.1 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.

4.6.2 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.

4.6.3 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 the ambient temperature is at or below the freezing point (32^0F).

4.7 Stockpiles

4.7.1 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.

4.7.2 Kiln Fuel (solid)

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.

5.0 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.

6.0 FUGITIVE DUST EMISSIONS OBSERVATIONS

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

6.1 Vehicle Traffic

6.1.1 Emissions from vehicle traffic will be observed at one paved raod and one unpaved road.

6.1.2 The average instantaneous opacity of fugitive particulate emissions from 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.

6.2 Batch Transfer of Materials into Storage Piles.

6.2.1 Emissions from transferring material into one storage pile will be observed.

6.2.2 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.

6.3 Wind Erosion

6.3.1 Emissions from wind erosion at the high-calcium limestone and dolomitic limestone storage piles and the lime kiln dust (LKD) storage piles will be observed.

6.3.2 Emissions from wind erosion will be observed.

6.3.3 The opacity due to wind erosion from these 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.

6.4 In-plant Transportation by Mobile Equipment

6.4.1 Emissions from traffic of one (1) front end loader and one (1) skip hoist will be observed.

6.4.2 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.

6.5 In-plant Transportation of Materials

6.5.1 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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality

Attachment A
for a
Part 70 Operating Permit

Source Background and Description

Source Name:	Carmeuse Lime, Inc.
Source Location:	1 North Carmeuse Drive, Gary, Indiana 46402
County:	Lake
SIC Code:	3274
Permit Renewal No.:	T089-27040-00112
Permit Reviewer:	Donald McQuigg

Subpart AAAAA—National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

Source: 69 FR 416, Jan. 5, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.7080 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for lime manufacturing plants. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.7081 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a lime manufacturing plant (LMP) that is a major source, or that is located at, or is part of, a major source of hazardous air pollutant (HAP) emissions, unless the LMP is located at a kraft pulp mill, soda pulp mill, sulfite pulp mill, beet sugar manufacturing plant, or only processes sludge containing calcium carbonate from water softening processes.

(1) An LMP is an establishment engaged in the manufacture of lime product (calcium oxide, calcium oxide with magnesium oxide, or dead burned dolomite) by calcination of limestone, dolomite, shells or other calcareous substances.

(2) A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year from all emission sources at the plant site.

(b) [Reserved]

§ 63.7082 What parts of my plant does this subpart cover?

(a) This subpart applies to each existing or new lime kiln(s) and their associated cooler(s), and processed stone handling (PSH) operations system(s) located at an LMP that is a major source.

(b) A new lime kiln is a lime kiln, and (if applicable) its associated lime cooler, for which construction or reconstruction began after December 20, 2002, if you met the applicability criteria in §63.7081 at the time you began construction or reconstruction.

(c) A new PSH operations system is the equipment in paragraph (g) of this section, for which construction or reconstruction began after December 20, 2002, if you met the applicability criteria in §63.7081 at the time you began construction or reconstruction.

(d) A lime kiln or PSH operations system is reconstructed if it meets the criteria for reconstruction defined in §63.2.

(e) An existing lime kiln is any lime kiln, and (if applicable) its associated lime cooler, that does not meet the definition of a new kiln of paragraph (b) of this section.

(f) An existing PSH operations system is any PHS operations system that does not meet the definition of a new PSH operations system in paragraph (c) of this section.

(g) A PSH operations system includes all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. It includes man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors. No other materials processing operations are subject to this subpart.

(h) Nuisance dust collectors on lime coolers are part of the lime materials processing operations and are not covered by this subpart.

(i) Lime hydrators are not subject to this subpart.

(j) Open material storage piles are not subject to this subpart.

§ 63.7083 When do I have to comply with this subpart?

(a) If you have a new affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before January 5, 2004, you must comply with the emission limitations no later than January 5, 2004, and you must have completed all applicable performance tests no later than July 5, 2004.

(2) If you start up your affected source after January 5, 2004, then you must comply with the emission limitations for new affected sources upon startup of your affected source and you must have completed all applicable performance tests no later than 180 days after startup.

(b) If you have an existing affected source, you must comply with the applicable emission limitations for the existing affected source, and you must have completed all applicable performance tests no later than January 5, 2007.

(c) If you have an LMP that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the deadlines specified in paragraphs (c)(1) and (2) of this section apply.

(1) New affected sources at your LMP you must be in compliance with this subpart upon startup.

(2) Existing affected sources at your LMP must be in compliance with this subpart within 3 years after your source becomes a major source of HAP.

(d) You must meet the notification requirements in §63.7130 according to the schedule in §63.7130 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

Emission Limitations

§ 63.7090 What emission limitations must I meet?

(a) You must meet each emission limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

General Compliance Requirements

§ 63.7100 What are my general requirements for complying with this subpart?

(a) After your initial compliance date, you must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must be in compliance with the opacity and visible emission (VE) limits in this subpart during the times specified in §63.6(h)(1).

(c) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(d) You must prepare and implement for each LMP, a written operations, maintenance, and monitoring (OM&M) plan. You must submit the plan to the applicable permitting authority for review and approval as part of the application for a 40 CFR part 70 or 40 CFR part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, you must comply with the provisions of the submitted plan. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.

(2) A monitoring schedule for each emission unit.

(3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 to this subpart, respectively.

(4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device;

(ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;

(iii) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii); and

(iv) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).

(5) Procedures for monitoring process and control device parameters.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to this subpart, including:

(i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.

(7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(e) You must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

[69 FR 416, Jan. 5, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

Testing and Initial Compliance Requirements

§ 63.7110 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) If you have an existing affected source, you must complete all applicable performance tests within January 5, 2007, according to the provisions in §§63.7(a)(2) and 63.7114.

(b) If you have a new affected source, and commenced construction or reconstruction between December 20, 2002, and January 5, 2004, you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than 180 calendar days after January 5, 2004 or within 180 calendar days after startup of the source, whichever is later, according to §§63.7(a)(2)(ix) and 63.7114.

(c) If you commenced construction or reconstruction between December 20, 2002, and January 5, 2004, and you chose to comply with the proposed emission limitation when demonstrating initial compliance, you must conduct a demonstration of compliance with the promulgated emission limitation within January 5, 2007 or after startup of the source, whichever is later, according to §§63.7(a)(2)(ix) and 63.7114.

(d) For each initial compliance requirement in Table 3 to this subpart that applies to you where the monitoring averaging period is 3 hours, the 3-hour period for demonstrating continuous compliance for emission units within existing affected sources at LMP begins at 12:01 a.m. on the compliance date for existing affected sources, that is, the day following completion of the initial compliance demonstration, and ends at 3:01 a.m. on the same day.

(e) For each initial compliance requirement in Table 3 to this subpart that applies to you where the monitoring averaging period is 3 hours, the 3-hour period for demonstrating continuous compliance for emission units within new or reconstructed affected sources at LMP begins at 12:01 a.m. on the day following completion of the initial compliance demonstration, as required in paragraphs (b) and (c) of this section, and ends at 3:01 a.m. on the same day.

§ 63.7111 When must I conduct subsequent performance tests?

You must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter.

§ 63.7112 What performance tests, design evaluations, and other procedures must I use?

(a) You must conduct each performance test in Table 4 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions specified in Table 4 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) Except for opacity and VE observations, you must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e) The emission rate of particulate matter (PM) from each lime kiln (and each lime cooler if there is a separate exhaust to the atmosphere from the lime cooler) must be computed for each run using Equation 1 of this section:

$$E = \left(C_k Q_k + C_c Q_c\right) / PK \qquad (Eq.\ 1)$$

Where:

E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

C_k= Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

Q_k= Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

C_c= Concentration of PM in the cooler effluent, grain/dscf. This value is zero if there is not a separate cooler exhaust to the atmosphere.

Q_c= Volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

(f)(1) If you choose to meet a weighted average emission limit as specified in item 4 of Table 1 to this subpart, you must calculate a combined particulate emission rate from all kilns and coolers within your LMP using Equation 2 of this section:

$$E_T = \sum_{i=1}^{n} E_i P_i / \sum_{i=1}^{n} P_i \qquad (Eq.\ 2)$$

Where:

E_T= Emission rate of PM from all kilns and coolers, lb/ton of stone feed.

E_i= Emission rate of PM from kiln i, or from kiln/cooler combination i, lb/ton of stone feed.

P_i= Stone feed rate to kiln i, ton/hr.

n = Number of kilns you wish to include in averaging.

(2) You do not have to include every kiln in this calculation, only include kilns you wish to average. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

(g) The weighted average PM emission limit from all kilns and coolers for which you are averaging must be calculated using Equation 3 of this section:

$$E_{TN} = \sum_{j=1}^{m} E_j P_j / \sum_{j=1}^{m} P_j \qquad (Eq.\ 3)$$

Where:

E_{TN}= Weighted average PM emission limit for all kilns and coolers being included in averaging at the LMP, lb/ton of stone feed.

E_j= PM emission limit (0.10 or 0.12) for kiln j, or for kiln/cooler combination j, lb/ton of stone feed.

P_j= Stone feed rate to kiln j, ton/hr.

m = Number of kilns and kiln/cooler combinations you are averaging at your LMP. You must include the same kilns in the calculation of $E_T$and E_{TN}. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

(h) Performance test results must be documented in complete test reports that contain the information required by paragraphs (h)(1) through (10) of this section, as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing.

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results, including opacity;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish operating limits; and

(10) Any other information required by the test method.

(i) [Reserved]

(j) You must establish any applicable 3-hour block average operating limit indicated in Table 2 to this subpart according to the applicable requirements in Table 3 to this subpart and paragraphs (j)(1) through (4) of this section.

(1) Continuously record the parameter during the PM performance test and include the parameter record(s) in the performance test report.

(2) Determine the average parameter value for each 15-minute period of each test run.

(3) Calculate the test run average for the parameter by taking the average of all the 15-minute parameter values for the run.

(4) Calculate the 3-hour operating limit by taking the average of the three test run averages.

(k) For each building enclosing any PSH operations that is subject to a VE limit, you must conduct a VE check according to item 18 in Table 4 to this subpart, and in accordance with paragraphs (k)(1) through (3) of this section.

(1) Conduct visual inspections that consist of a visual survey of the building over the test period to identify if there are VE, other than condensed water vapor.

(2) Select a position at least 15 but not more 1,320 feet from each side of the building with the sun or other light source generally at your back.

(3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in appendix A to part 60 of this chapter, but must meet the training requirements as described in EPA Method 22 in appendix A to part 60 of this chapter.

(l) When determining compliance with the opacity standards for fugitive emissions from PSH operations in item 7 of Table 1 to this subpart, you must conduct EPA Method 9 in appendix A to part 60 of this chapter according to item 17 in Table 4 to this subpart, and in accordance with paragraphs (l)(1) through (3) of this section.

(1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.,* road dust). The required observer position relative to the sun must be followed.

(3) If you use wet dust suppression to control PM from PSH operations, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered VE. When a water mist of this nature is present, you must observe emissions at a point in the plume where the mist is no longer visible.

§ 63.7113 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to your OM&M plan required by §63.7100(d) and paragraphs (a)(1) through (5) of this section, and you must install, operate, and maintain each continuous opacity monitoring system (COMS) as required by paragraph (g) of this section

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To calculate a valid hourly value, you must have at least four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CPMS that is not out of control according your OM&M plan, and use all valid data.

(3) To calculate the average for each 3-hour block averaging period, you must use all valid data, and you must have at least 66 percent of the hourly averages for that period using only hourly average values that are based on valid data (*i.e.,* not from out-of-control periods).

(4) You must conduct a performance evaluation of each CPMS in accordance with your OM&M plan.

(5) You must continuously operate and maintain the CPMS according to the OM&M plan, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and (b)(1) through (4) of this section.

(1) Use a flow sensor with a minimum tolerance of 2 percent of the flow rate.

(2) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(3) Conduct a flow sensor calibration check at least semiannually.

(4) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to as possible a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 0.5 inch of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each bag leak detection system (BLDS), you must meet any applicable requirements in paragraphs (a)(1) through (5) and (d)(1) through (8) of this section.

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the BLDS must provide output of relative PM emissions.

(3) The BLDS must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(4) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(5) For a positive-pressure fabric filter (FF), each compartment or cell must have a bag leak detector (BLD). For a negative-pressure or induced-air FF, the BLD must be installed downstream of the FF. If multiple BLD are required (for either type of FF), the detectors may share the system instrumentation and alarm.

(6) Bag leak detection systems must be installed, operated, adjusted, and maintained according to the manufacturer's written specifications and recommendations. Standard operating procedures must be incorporated into the OM&M plan.

(7) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:

(i) Adjust the range and the averaging period of the device.

(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the OM&M plan required by §63.7100(d). In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365-day period unless a responsible official, as defined in §63.2, certifies in writing to the Administrator that the FF has been inspected and found to be in good operating condition.

(e) For each PM detector, you must meet any applicable requirements in paragraphs (a)(1) through (5) and (e)(1) through (8) of this section.

(1) The PM detector must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the PM detector must provide output of relative PM emissions.

(3) The PM detector must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(4) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(5) For a positive-pressure electrostatic precipitator (ESP), each compartment must have a PM detector. For a negative-pressure or induced-air ESP, the PM detector must be installed downstream of the ESP. If multiple PM detectors are required (for either type of ESP), the detectors may share the system instrumentation and alarm.

(6) Particulate matter detectors must be installed, operated, adjusted, and maintained according to the manufacturer's written specifications and recommendations. Standard operating procedures must be incorporated into the OM&M plan.

(7) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:

(i) Adjust the range and the averaging period of the device.

(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the OM&M plan required by §63.7100(d). In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365-day period unless a responsible official as defined in §63.2 certifies in writing to the Administrator that the ESP has been inspected and found to be in good operating condition.

(f) For each emission unit equipped with an add-on air pollution control device, you must inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in item 6 of Table 2 to this subpart and record the results of each inspection.

(g) For each COMS used to monitor an add-on air pollution control device, you must meet the requirements in paragraphs (g)(1) and (2) of this section.

(1) Install the COMS at the outlet of the control device.

(2) Install, maintain, calibrate, and operate the COMS as required by 40 CFR part 63, subpart A, General Provisions and according to Performance Specification (PS)–1 of appendix B to part 60 of this chapter. Facilities that operate COMS installed on or before February 6, 2001, may continue to meet the requirements in effect at the time of COMS installation unless specifically required to re-certify the COMS by their permitting authority.

§ 63.7114 How do I demonstrate initial compliance with the emission limitations standard?

(a) You must demonstrate initial compliance with each emission limit in Table 1 to this subpart that applies to you, according to Table 3 to this subpart. For existing lime kilns and their associated coolers, you may perform VE measurements in accordance with EPA Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in paragraphs (a)(1) through (3) of this section exist:

(1) You use a FF for PM control, and the FF is under positive pressure and has multiple stacks; or

(2) The control device exhausts through a monovent; or

(3) The installation of a COMS in accordance with PS–1 of appendix B to part 60 is infeasible.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.7112(j) and Table 4 to this subpart. Alternative parameters may be monitored if approval is obtained according to the procedures in §63.8(f)

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7130(e).

Continuous Compliance Requirements

§ 63.7120 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, you must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating.

(c) Data recorded during the conditions described in paragraphs (c)(1) through (3) of this section may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;

(2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and

(3) Start-ups, shutdowns, and malfunctions.

§ 63.7121 How do I demonstrate continuous compliance with the emission limitations standard?

(a) You must demonstrate continuous compliance with each emission limitation in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Tables 5 and 6 to this subpart.

(b) You must report each instance in which you did not meet each operating limit, opacity limit, and VE limit in Tables 2 and 6 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.7131.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(e) For each PSH operation subject to an opacity limit as specified in Table 1 to this subpart, and any vents from buildings subject to an opacity limit, you must conduct a VE check according to item 1 in Table 6 to this subpart, and as follows:

(1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor.

(2) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at your back.

(3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in appendix A to part 60 of this chapter, but must meet the training requirements as described in EPA Method 22 of appendix A to part 60 of this chapter.

(f) For existing lime kilns and their associated coolers, you may perform VE measurements in accordance with EPA Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in paragraphs (f)(1) or (3) of this section exist:

(1) You use a FF for PM control, and the FF is under positive pressure and has multiple stacks; or

(2) The control device exhausts through a monovent; or

(3) The installation of a COMS in accordance with PS–1 of appendix B to part 60 is infeasible.

[69 FR 416, Jan. 5, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

Notification, Reports, and Records

§ 63.7130 What notifications must I submit and when?

(a) You must submit all of the notifications in §§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 you, by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your affected source before January 5, 2004, you must submit an initial notification not later than 120 calendar days after January 5, 2004.

(c) If you startup your new or reconstructed affected source on or after January 5, 2004, you must submit an initial notification not later than 120 calendar days after you start up your affected source.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 3 or 4 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 3 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7131 What reports must I submit and when?

(a) You must submit each report listed in Table 7 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 7 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7083 and ending on June 30 or December 31, whichever date is the first date following the end of the first half calendar year after the compliance date that is specified for your source in §63.7083.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first half calendar year after the compliance date that is specified for your affected source in §63.7083.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, if the permitting authority has established dates for submitting semiannual reports pursuant to §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information specified in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.

(d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart,

the compliance report must contain the information specified in paragraphs (c)(1) through (4) and (d)(1) and (2) of this section. The deviations must be reported in accordance with the requirements in §63.10(d).

(1) The total operating time of each emission unit during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information specified in paragraphs (c)(1) through (4) and (e)(1) through (11) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each facility that has obtained a title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter. If you submit a compliance report specified in Table 7 to this subpart along with, or as part of, the semiannual monitoring report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority.

§ 63.7132 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity and VE observations as required in §63.10(b)(2)(viii).

(b) You must keep the records in §63.6(h)(6) for VE observations.

(c) You must keep the records required by Tables 5 and 6 to this subpart to show continuous compliance with each emission limitation that applies to you.

(d) You must keep the records which document the basis for the initial applicability determination as required under §63.7081.

§ 63.7133 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7140 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. When there is overlap between subpart A and subpart AAAAA, as indicated in the “Explanations” column in Table 8, subpart AAAAA takes precedence.

§ 63.7141 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or by a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of alternatives to the non-opacity emission limitations in §63.7090(a).

(2) Approval of alternative opacity emission limitations in §63.7090(a).

(3) Approval of alternatives to the operating limits in §63.7090(b).

(4) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(5) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(6) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7142 What are the requirements for claiming area source status?

(a) If you wish to claim that your LMP is an area source, you must measure the emissions of hydrogen chloride from all lime kilns, except as provided in paragraph (c) of this section, at your plant using either:

(1) EPA Method 320 of appendix A to this part,

(2) EPA Method 321 of appendix A to this part, or

(3) ASTM Method D6735–01, Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method, provided that the provisions in paragraphs (a)(3)(i) through (vi) of this section are followed.

(i) A test must include three or more runs in which a pair of samples is obtained simultaneously for each run according to section 11.2.6 of ASTM Method D6735–01.

(ii) You must calculate the test run standard deviation of each set of paired samples to quantify data precision, according to Equation 1 of this section:

$$RSD_a = (100)\ Absolute\ Value \left[\frac{C1_a - C2_a}{C1_a + C2_a}\right] \qquad (Eq.\ 1)$$

Where:

RSD_a= The test run relative standard deviation of sample pair a, percent.

$C1_a$and $C2_a$= The HCl concentrations, milligram/dry standard cubic meter(mg/dscm), from the paired samples.

(iii) You must calculate the test average relative standard deviation according to Equation 2 of this section:

$$RSD_{TA} = \frac{\sum_{a=1}^{p} RSD_a}{p} \qquad (Eq.\ 2)$$

Where:

RSD_{TA}= The test average relative standard deviation, percent.

RSD_a= The test run relative standard deviation for sample pair a.

p = The number of test runs, ≥3.

(iv) If RSD^{TA} is greater than 20 percent, the data are invalid and the test must be repeated.

(v) The post-test analyte spike procedure of section 11.2.7 of ASTM Method D6735–01 is conducted, and the percent recovery is calculated according to section 12.6 of ASTM Method D6735–01.

(vi) If the percent recovery is between 70 percent and 130 percent, inclusive, the test is valid. If the percent recovery is outside of this range, the data are considered invalid, and the test must be repeated.

(b) If you conduct tests to determine the rates of emission of specific organic HAP from lime kilns at LMP for use in applicability determinations under §63.7081, you may use either:

(1) Method 320 of appendix A to this part, or

(2) Method 18 of appendix A to part 60 of this chapter, or

(3) ASTM D6420–99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (GC/MS), provided that the provisions of paragraphs (b)(3)(i) through (iv) of this section are followed:

(i) The target compound(s) are those listed in section 1.1 of ASTM D6420–99;

(ii) The target concentration is between 150 parts per billion by volume and 100 parts per million by volume;

(iii) For target compound(s) not listed in Table 1.1 of ASTM D6420–99, but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in section 10.5.3 of ASTM D6420–99, is conducted, met, documented, and submitted with the data report, even if there is no moisture condenser used or the compound is not considered water soluble; and

(iv) For target compound(s) not listed in Table 1.1 of ASTM D6420–99, and not amenable to detection by mass spectrometry, ASTM D6420–99 may not be used.

(c) It is left to the discretion of the permitting authority whether or not idled kilns must be tested for (HCl) to claim area source status. If the facility has kilns that use common feed materials and fuel, are essentially identical in design, and use essentially identical emission controls, the permitting authority may also determine if one kiln can be tested, and the HCl emissions for the other essentially identical kilns be estimated from that test.

§ 63.7143 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows:

Bag leak detector system (BLDS) is a type of PM detector used on FF to identify an increase in PM emissions resulting from a broken filter bag or other malfunction and sound an alarm.

Belt conveyor means a conveying device that transports *processed stone* from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a *processed stone* conveying device consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport PM to a control device.

Control device means the air pollution control equipment used to reduce PM emissions released to the atmosphere from one or more process operations at an LMP.

Conveying system means a device for transporting *processed stone* from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to feeders, belt conveyors, bucket elevators and pneumatic systems.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including any operating limit);

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation (including any operating limit) in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is allowed by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or VE limit.

Emission unit means a lime kiln, lime cooler, storage bin, conveying system transfer point, bulk loading or unloading operation, bucket elevator or belt conveyor at an LMP.

Fugitive emission means PM that is not collected by a capture system.

Hydrator means the device used to produce hydrated lime or calcium hydroxide via the chemical reaction of the lime product with water.

Lime cooler means the device external to the lime kiln (or part of the lime kiln itself) used to reduce the temperature of the lime produced by the kiln.

Lime kiln means the device, including any associated preheater, used to produce a lime product from stone feed by calcination. Kiln types include, but are not limited to, rotary kiln, vertical kiln, rotary hearth kiln, double-shaft vertical kiln, and fluidized bed kiln.

Lime manufacturing plant (LMP) means any plant which uses a lime kiln to produce lime product from limestone or other calcareous material by calcination.

Lime product means the product of the lime kiln calcination process including, calcitic lime, dolomitic lime, and dead-burned dolomite.

Limestone means the material comprised primarily of calcium carbonate (referred to sometimes as calcitic or high calcium limestone), magnesium carbonate, and/or the double carbonate of both calcium and magnesium (referred to sometimes as dolomitic limestone or dolomite).

Monovent means an exhaust configuration of a building or emission control device (*e.g.,* positive pressure FF) that extends the length of the structure and has a width very small in relation to its length (*i.e.,* length-to-width ratio is typically greater than 5:1). The exhaust may be an open vent with or without a roof, louvered vents, or a combination of such features.

Particulate matter (PM) detector means a system that is continuously capable of monitoring PM loading in the exhaust of FF or ESP in order to detect bag leaks, upset conditions, or control device malfunctions and sounds an alarm at a preset level. A PM detector system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effects to continuously monitor relative particulate loadings. A BLDS is a type of PM detector.

Positive pressure FF or ESP means a FF or ESP with the fan(s) on the upstream side of the control device.

Process stone handling operations means the equipment and transfer points between the equipment used to transport *processed stone,* and includes, storage bins, conveying system transfer points, bulk loading or unloading systems, screening operations, bucket elevators, and belt conveyors.

Processed stone means limestone or other calcareous material that has been processed to a size suitable for feeding into a lime kiln.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

Stack emissions means the PM that is released to the atmosphere from a capture system or control device.

Storage bin means a manmade enclosure for storage (including surge bins) of *processed stone* prior to the lime kiln.

Transfer point means a point in a conveying operation where the material is transferred to or from a belt conveyor.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying PM emissions from one or more emission units.

Table 1 to Subpart AAAAA of Part 63—Emission Limits

As required in §63.7090(a), you must meet each emission limit in the following table that applies to you.

For . . .	You must meet the following emission limit
1. Existing lime kilns and their associated lime coolers that did not have a wet scrubber installed and operating prior to January 5, 2004	PM emissions must not exceed 0.12 pounds per ton of stone feed (lb/tsf).
2. Existing lime kilns and their associated lime coolers that have a wet scrubber, where the scrubber itself was installed and operating prior to January 5, 2004	PM emissions must not exceed 0.60 lb/tsf. If at any time after January 5, 2004 the kiln changes to a dry control system, then the PM emission limit in item 1 of this Table 1 applies, and the kiln is hereafter ineligible for the PM emission limit in item 2 of this Table 1 regardless of the method of PM control.
3. New lime kilns and their associated lime coolers	PM emissions must not exceed 0.10 lb/tsf.
4. All existing and new lime kilns and their associated coolers at your LMP, and you choose to average PM emissions, except that any kiln that is allowed to meet the 0.60 lb/tsf PM emission limit is ineligible for averaging	Weighted average PM emissions calculated according to Eq. 2 in §63.7112 must not exceed 0.12 lb/tsf (if you are averaging only existing kilns) or 0.10 lb/tsf (if you are averaging only new kilns). If you are averaging existing and new kilns, your weighted average PM emissions must not exceed the weighted average emission limit calculated according to Eq. 3 in §63.7112, except that no new kiln and its associated cooler considered alone may exceed an average PM emissions limit of 0.10 lb/tsf.
5. Stack emissions from all PSH operations at a new or existing affected source	PM emissions must not exceed 0.05 grams per dry standard cubic meter (g/dscm).

6. Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device	Emissions must not exceed 7 percent opacity.
7. Fugitive emissions from all PSH operations at a new or existing affected source, except as provided by item 8 of this Table 1	Emissions must not exceed 10 percent opacity.
8. All PSH operations at a new or existing affected source enclosed in a building	All of the individually affected PSH operations must comply with the applicable PM and opacity emission limitations in items 5 through 7 of this Table 1, or the building must comply with the following: There must be no VE from the building, except from a vent; and vent emissions must not exceed the stack emissions limitations in items 5 and 6 of this Table 1.
9. Each FF that controls emissions from only an individual, enclosed storage bin	Emissions must not exceed 7 percent opacity.
10. Each set of multiple storage bins at a new or existing affected source, with combined stack emissions	You must comply with the emission limits in items 5 and 6 of this Table 1.

Table 2 to Subpart AAAAA of Part 63—Operating Limits

As required in §63.7090(b), you must meet each operating limit in the following table that applies to you.

For . . .	You must . . .
1. Each lime kiln and each lime cooler (if there is a separate exhaust to the atmosphere from the associated lime cooler) equipped with an FF	Maintain and operate the FF such that the BLDS or PM detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in §63.7113(d) through (f) and Table 5 to this subpart. In lieu of a BLDS or PM detector maintain the FF such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent; and comply with the requirements in §63.7113(f) and (g) and Table 5 to this subpart.
2. Each lime kiln equipped with a wet scrubber	Maintain the 3-hour block exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the most recent PM performance test; and maintain the 3-hour block scrubbing liquid flow rate greater than the flow rate operating limit established during the most recent performance test.

3. Each lime kiln equipped with an electrostatic precipitator	Install a PM detector and maintain and operate the ESP such that the PM detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period, and comply with §63.7113(e); or, maintain the ESP such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent, and comply with the requirements in §63.7113(g); and comply with the requirements in §63.7113(f) and Table 5 to this subpart.
4. Each PSH operation subject to a PM limit which uses a wet scrubber	Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test.
5. All affected sources	Prepare a written OM&M plan; the plan must include the items listed in §63.7100(d) and the corrective actions to be taken when required in Table 5 to this subpart.
6. Each emission unit equipped with an add-on air pollution control device	a. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to an FF; and b. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

Table 3 to Subpart AAAAA of Part 63—Initial Compliance With Emission Limits

As required in §63.7114, you must demonstrate initial compliance with each emission limitation that applies to you, according to the following table.

For . . .	For the following emission limit . . .	You have demonstrated initial compliance, if after following the requirements in §63.7112 . . .
1. All new or existing lime kilns and their associated lime coolers (kilns/coolers)	PM emissions must not exceed 0.12 lb/tsf for all existing kilns/coolers with dry controls, 0.60 lb/tsf for existing kilns/coolers with wet scrubbers, 0.10 lb/tsf for all new kilns/coolers, or a weighted average calculated according to Eq. 3 in §63.7112	The kiln outlet PM emissions (and if applicable, summed with the separate cooler PM emissions), based on the PM emissions measured using Method 5 in appendix A to part 60 of this chapter and the stone feed rate measurement over the period of initial performance test, do not exceed the emission limit; if the lime kiln is controlled by an FF or ESP and you are opting to monitor PM emissions

		with a BLDS or PM detector, you have installed and are operating the monitoring device according to the requirements in §63.7113(d) or (e), respectively; and if the lime kiln is controlled by an FF or ESP and you are opting to monitor PM emissions using a COMS, you have installed and are operating the COMS according to the requirements in §63.7113(g).
2. Stack emissions from all PHS operations at a new or existing affected source	PM emissions must not exceed 0.05 g/dscm	The outlet PM emissions, based on Method 5 or Method 17 in appendix A to part 60 of this chapter, over the period of the initial performance test do not exceed 0.05 g/dscm; and if the emission unit is controlled with a wet scrubber, you have a record of the scrubber's pressure drop and liquid flow rate operating parameters over the 3-hour performance test during which emissions did not exceed the emissions limitation.
3. Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device	Emissions must not exceed 7 percent opacity	Each of the thirty 6-minute opacity averages during the initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 7 percent opacity limit. At least thirty 6-minute averages must be obtained.
4. Fugitive emissions from all PSH operations at a new or existing affected source	Emissions must not exceed 10 percent opacity	Each of the 6-minute opacity averages during the initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 10 percent opacity limit.
5. All PSH operations at a new or existing affected source, enclosed in building	All of the individually affected PSH operations must comply with the applicable PM and opacity emission limitations for items 2 through 4 of this Table 3, or the building must comply with the	All the PSH operations enclosed in the building have demonstrated initial compliance according to the applicable requirements for items 2 through 4 of this Table 3; or if you are complying with the building

	following: There must be no VE from the building, except from a vent, and vent emissions must not exceed the emission limitations in items 2 and 3 of this Table 3	emission limitations, there are no VE from the building according to item 18 of Table 4 to this subpart and §63.7112(k), and you demonstrate initial compliance with applicable building vent emissions limitations according to the requirements in items 2 and 3 of this Table 3.
6. Each FF that controls emissions from only an individual storage bin	Emissions must not exceed 7 percent opacity	Each of the ten 6-minute averages during the 1-hour initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 7 percent opacity limit.
7. Each set of multiple storage bins with combined stack emissions	You must comply with emission limitations in items 2 and 3 of this Table 3	You demonstrate initial compliance according to the requirements in items 2 and 3 of this Table 3.

Table 4 to Subpart AAAAA of Part 63—Requirements for Performance Tests

As required in §63.7112, you must conduct each performance test in the following table that applies to you.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
1. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler	Select the location of the sampling port and the number of traverse ports	Method 1 or 1A of appendix A to part 60 of this chapter; and §63.6(d)(1)(i)	Sampling sites must be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
2. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler	Determine velocity and volumetric flow rate	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter	Not applicable.
3. Each lime kiln and each associated lime cooler, if there	Conduct gas molecular weight analysis	Method 3, 3A, or 3B in appendix A to part 60 of this chapter	Not applicable.

is a separate exhaust to the atmosphere from the associated lime cooler			
4. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler	Measure moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter	Not applicable.
5. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler, and which uses a negative pressure PM control device	Measure PM emissions	Method 5 in appendix A to part 60 of this chapter	Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e); the minimum sampling volume must be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)); if there is a separate lime cooler exhaust to the atmosphere, you must conduct the Method 5 test of the cooler exhaust concurrently with the kiln exhaust test.
6. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler, and which uses a positive pressure FF or ESP	Measure PM emissions	Method 5D in appendix A to part 60 of this chapter	Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e); if there is a separate lime cooler exhaust to the atmosphere, you must conduct the Method 5 test of the separate cooler exhaust concurrently with the kiln exhaust test.
7. Each lime kiln	Determine the mass rate of stone feed to the kiln during the kiln PM emissions test	Any suitable device	Calibrate and maintain the device according to manufacturer's instructions; the measuring device used must be accurate to within ±5 percent of the mass rate of

			stone feed over its operating range.
8. Each lime kiln equipped with a wet scrubber	Establish the operating limit for the average gas stream pressure drop across the wet scrubber	Data for the gas stream pressure drop measurement device during the kiln PM performance test	The continuous pressure drop measurement device must be accurate within plus or minus 1 percent; you must collect the pressure drop data during the period of the performance test and determine the operating limit according to §63.7112(j).
9. Each lime kiln equipped with a wet scrubber	Establish the operating limit for the average liquid flow rate to the scrubber	Data from the liquid flow rate measurement device during the kiln PM performance test	The continuous scrubbing liquid flow rate measuring device must be accurate within plus or minus 1 percent; you must collect the flow rate data during the period of the performance test and determine the operating limit according to §63.7112(j).
10. Each lime kiln equipped with a FF or ESP that is monitored with a PM detector	Have installed and have operating the BLDS or PM detector prior to the performance test	Standard operating procedures incorporated into the OM&M plan	According to the requirements in §63.7113(d) or (e), respectively.
11. Each lime kiln equipped with a FF or ESP that is monitored with a COMS	Have installed and have operating the COMS prior to the performance test	Standard operating procedures incorporated into the OM&M plan and as required by 40 CFR part 63, subpart A, General Provisions and according to PS–1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2)	According to the requirements in §63.7113(g).
12. Each stack emission from a PSH operation, vent from a building enclosing a PSH	Measure PM emissions	Method 5 or Method 17 in appendix A to part 60 of this chapter	The sample volume must be at least 1.70 dscm (60 dscf); for Method 5, if the gas stream being sampled is at ambient temperature, the sampling

operation, or set of multiple storage bins with combined stack emissions, which is subject to a PM emission limit			probe and filter may be operated without heaters; and if the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter (Method 17 may be used only with exhaust gas temperatures of not more than 250 °F).
13. Each stack emission from a PSH operation, vent from a building enclosing a PSH operation, or set of multiple storage bins with combined stack emissions, which is subject to an opacity limit	Conduct opacity observations	Method 9 in appendix A to part 60 of this chapter	The test duration must be for at least 3 hours and you must obtain at least thirty, 6-minute averages.
14. Each stack emissions source from a PSH operation subject to a PM or opacity limit, which uses a wet scrubber	Establish the average gas stream pressure drop across the wet scrubber	Data for the gas stream pressure drop measurement device during the PSH operation stack PM performance test	The pressure drop measurement device must be accurate within plus or minus 1 percent; you must collect the pressure drop data during the period of the performance test and determine the operating limit according to §63.7112(j).
15. Each stack emissions source from a PSH operation subject to a PM or opacity limit, which uses a wet scrubber	Establish the operating limit for the average liquid flow rate to the scrubber	Data from the liquid flow rate measurement device during the PSH operation stack PM performance test	The continuous scrubbing liquid flow rate measuring device must be accurate within plus or minus 1 percent; you must collect the flow rate data during the period of the performance test and determine the operating limit according to §63.7112(j).
16. Each FF that controls emissions	Conduct opacity observations	Method 9 in appendix A to part 60 of this chapter	The test duration must be for at least 1 hour and you must

from only an individual, enclosed, new or existing storage bin			obtain ten 6-minute averages.
17. Fugitive emissions from any PSH operation subject to an opacity limit	Conduct opacity observations	Method 9 in appendix A to part 60 of this chapter	The test duration must be for at least 3 hours, but the 3-hour test may be reduced to 1 hour if, during the first 1-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent during the first 1-hour period.
18. Each building enclosing any PSH operation, that is subject to a VE limit	Conduct VE check	The specifications in §63.7112(k)	The performance test must be conducted while all affected PSH operations within the building are operating; the performance test for each affected building must be at least 75 minutes, with each side of the building and roof being observed for at least 15 minutes.

Table 5 to Subpart AAAAA of Part 63—Continuous Compliance with Operating Limits

As required in §63.7121, you must demonstrate continuous compliance with each operating limit that applies to you, according to the following table:

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
1. Each lime kiln controlled by a wet scrubber	Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test	Collecting the wet scrubber operating data according to all applicable requirements in §63.7113 and reducing the data according to §63.7113(a); maintaining the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintaining the 3-hour block average scrubbing liquid flow rate greater than or equal to the

		flow rate operating limit established during the performance test (the continuous scrubbing liquid flow rate measuring device must be accurate within ±1% and the continuous pressure drop measurement device must be accurate within ±1%).
2. Each lime kiln or lime cooler equipped with a FF and using a BLDS, and each lime kiln equipped with an ESP or FF using a PM detector	a. Maintain and operate the FF or ESP such that the bag leak or PM detector alarm, is not activated and alarm condition does not exist for more than 5 percent of the total operating time in each 6-month period	(i) Operating the FF or ESP so that the alarm on the bag leak or PM detection system is not activated and an alarm condition does not exist for more than 5 percent of the total operating time in each 6-month reporting period; and continuously recording the output from the BLD or PM detection system; and
		(ii) Each time the alarm sounds and the owner or operator initiates corrective actions within 1 hour of the alarm, 1 hour of alarm time will be counted (if the owner or operator takes longer than 1 hour to initiate corrective actions, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions); if inspection of the FF or ESP system demonstrates that no corrective actions are necessary, no alarm time will be counted.
3. Each stack emissions source from a PSH operation subject to an opacity limit, which is controlled by a wet scrubber	Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test	Collecting the wet scrubber operating data according to all applicable requirements in §63.7113 and reducing the data according to §63.7113(a); maintaining the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintaining the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test (the continuous scrubbing liquid flow rate measuring device must be accurate

		within ±1% and the continuous pressure drop measurement device must be accurate within ±1%).
4. For each lime kiln or lime cooler equipped with a FF or an ESP that uses a COMS as the monitoring device	a. Maintain and operate the FF or ESP such that the average opacity for any 6-minute block period does not exceed 15 percent	i. Installing, maintaining, calibrating and operating a COMS as required by 40 CFR part 63, subpart A, General Provisions and according to PS–1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2); and
		ii. Collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.

Table 6 to Subpart AAAAA of Part 63—Periodic Monitoring for Compliance With Opacity and Visible Emissions Limits

As required in §63.7121 you must periodically demonstrate compliance with each opacity and VE limit that applies to you, according to the following table:

For . . .	For the following emission limitation . . .	You must demonstrate ongoing compliance . . .
1. Each PSH operation subject to an opacity limitation as required in Table 1 to this subpart, or any vents from buildings subject to an opacity limitation	a. 7–10 percent opacity, depending on the PSH operation, as required in Table 1 to this subpart	(i) Conducting a monthly 1-minute VE check of each emission unit in accordance with §63.7121(e); the check must be conducted while the affected source is in operation; (ii) If no VE are observed in 6 consecutive monthly checks for any emission unit, you may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;
		(iii) If no VE are observed during the semiannual check for any emission unit, you may decrease the frequency of VE checking from semi-

		annually to annually for that emission unit; if VE are observed during any annual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
		(iv) If VE are observed during any VE check, you must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter; you must begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.
2. Any building subject to a VE limit, according to item 8 of Table 1 to this subpart	a. No VE	(i) Conducting a monthly VE check of the building, in accordance with the specifications in §63.7112(k); the check must be conducted while all the enclosed PSH operations are operating; (ii) The check for each affected building must be at least 5 minutes, with each side of the building and roof being observed for at least 1 minute;
		(iii) If no VE are observed in 6 consecutive monthly checks of the building, you may decrease the frequency of checking from monthly to semi-annually for that affected source; if VE are observed during any semi-annual check, you must resume checking on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
		(iv) If no VE are observed during the semi-annual check, you may decrease the frequency of checking from semi-annually to annually for that affected source; and if VE are observed during any annual check, you must resume checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks (the source is in compliance if no VE are observed during any of these checks).

Table 7 to Subpart AAAAA of Part 63—Requirements for Reports

As required in §63.7131, you must submit each report in this table that applies to you.

You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that applies to you, a statement that there were no deviations from the emission limitations during the reporting period;	Semiannually according to the requirements in §63.7131(b).
	b. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;	Semiannually according to the requirements in §63.7131(b).
	c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and VE limit) during the reporting period, the report must contain the information in §63.7131(d);	Semiannually according to the requirements in §63.7131(b).
	d. If there were periods during which the CMS, including any operating parameter monitoring system, was out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.7131(e); and	Semiannually according to the requirements in §63.7131(b).
	e. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i)	Semiannually according to the requirements in §63.7131(b).
2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP	Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the SSMP.

3. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP	The information in §63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. See §63.10(d)(5)(ii).

Table 8 to Subpart AAAAA of Part 63—Applicability of General Provisions to Subpart AAAAA

As required in §63.7140, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Summary of requirement	Am I subject to this requirement?	Explanations
§63.1(a)(1)–(4)	Applicability	Yes	
§63.1(a)(5)		No	
§63.1(a)(6)	Applicability	Yes	
§63.1(a)(7)–(a)(9)		No	
§63.1(a)(10)–(a)(14)	Applicability	Yes	
§63.1(b)(1)	Initial Applicability Determination	Yes	§§63.7081 and 63.7142 specify additional applicability determination requirements.
§63.1(b)(2)		No	
§63.1(b)(3)	Initial Applicability Determination	Yes	
§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)	Permit Requirements	No	Area sources not subject to subpart AAAAA, except all sources must make initial applicability determination.
§63.1(c)(3)		No	
§63.1(c)(4)–(5)	Extensions, Notifications	Yes	

§63.1(d)		No	
§63.1(e)	Applicability of Permit Program	Yes	
§63.2	Definitions		Additional definitions in §63.7143.
§63.3(a)–(c)	Units and Abbreviations	Yes	
§63.4(a)(1)–(a)(2)	Prohibited Activities	Yes	
§3.4(a)(3)–(a)(5)		No	
§63.4(b)–(c)	Circumvention, Severability	Yes	
§63.5(a)(1)–(2)	Construction/Reconstruction	Yes	
§63.5(b)(1)	Compliance Dates	Yes	
§63.5(b)(2)		No	
§63.5(b)(3)–(4)	Construction Approval, Applicability	Yes	
§63.5(b)(5)		No	
§63.5(b)(6)	Applicability	Yes	
§63.5(c)		No	
§63.5(d)(1)–(4)	Approval of Construction/Reconstruction	Yes	
§63.5(e)	Approval of Construction/Reconstruction	Yes	
§63.5(f)(1)–(2)	Approval of Construction/Reconstruction	Yes	
§63.6(a)	Compliance for Standards and Maintenance	Yes	
§63.6(b)(1)–(5)	Compliance Dates	Yes	
§63.6(b)(6)		No	
§63.6(b)(7)	Compliance Dates	Yes	
§63.6(c)(1)–(2)	Compliance Dates	Yes	
§63.6(c)(3)–		No	

(c)(4)			
§63.6(c)(5)	Compliance Dates	Yes	
§63.6(d)		No	
§63.6(e)(1)	Operation & Maintenance	Yes	See §63.7100 for OM&M requirements.
§63.6(e)(2)		No	
§63.6(e)(3)	Startup, Shutdown Malfunction Plan	Yes	
§63.6(f)(1)–(3)	Compliance with Emission Standards	Yes	
§63.6(g)(1)–(g)(3)	Alternative Standard	Yes	
§63.6(h)(1)–(2)	Opacity/VE Standards	Yes	
§63.6(h)(3)		No	
§63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	This requirement only applies to opacity and VE performance checks required in Table 4 to subpart AAAAA.
§63.6(h)(5) (ii)–(iii)	Opacity/VE Standards	No	Test durations are specified in subpart AAAAA; subpart AAAAA takes precedence.
§63.6(h)(5)(iv)	Opacity/VE Standards	No	
§63.6(h)(5)(v)	Opacity/VE Standards	Yes	
§63.6(h)(6)	Opacity/VE Standards	Yes	
§63.6(h)(7)	COM Use	Yes	
§63.6(h)(8)	Compliance with Opacity and VE	Yes	
§63.6(h)(9)	Adjustment of Opacity Limit	Yes	
§63.6(i)(1)–(i)(14)	Extension of Compliance	Yes	
§63.6(i)(15)		No	
§63.6(i)(16)	Extension of Compliance	Yes	

§63.6(j)	Exemption from Compliance	Yes	
§63.7(a)(1)–(a)(3)	Performance Testing Requirements	Yes	§63.7110 specifies deadlines; §63.7112 has additional specific requirements.
§63.7(b)	Notification	Yes	
§63.7(c)	Quality Assurance/Test Plan	Yes	
§63.7(d)	Testing Facilities	Yes	
§63.7(e)(1)–(4)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis	Yes	
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements	Yes	See §63.7113.
§63.8(a)(2)	Monitoring	Yes	
§63.8(a)(3)		No	
§63.8(a)(4)	Monitoring	No	Flares not applicable.
§63.8(b)(1)–(3)	Conduct of Monitoring	Yes	
§63.8(c)(1)–(3)	CMS Operation/Maintenance	Yes	
§63.8(c)(4)	CMS Requirements	No	See §63.7121.
§63.8(c)(4)(i)–(ii)	Cycle Time for COM and CEMS	Yes	No CEMS are required under subpart AAAAA; see §63.7113 for CPMS requirements.
§63.8(c)(5)	Minimum COM procedures	Yes	COM not required.
§63.8(c)(6)	CMS Requirements	No	See §63.7113.
§63.8(c)(7)–(8)	CMS Requirements	Yes	
§63.8(d)	Quality Control	No	See §63.7113.
§63.8(e)	Performance Evaluation for CMS	No	
§63.8(f)(1)–(f)(5)	Alternative Monitoring Method	Yes	

§63.8(f)(6)	Alternative to Relative Accuracy test	No	
§63.8(g)(1)–(g)(5)	Data Reduction; Data That Cannot Be Used	No	See data reduction requirements in §§63.7120 and 63.7121.
§63.9(a)	Notification Requirements	Yes	See §63.7130.
§63.9(b)	Initial Notifications	Yes	
§63.9(c)	Request for Compliance Extension	Yes	
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	
§63.9(f)	Notification of VE/Opacity Test	Yes	This requirement only applies to opacity and VE performance tests required in Table 4 to subpart AAAAA. Notification not required for VE/opacity test under Table 6 to subpart AAAAA.
§63.9(g)	Additional CMS Notifications	No	Not required for operating parameter monitoring.
§63.9(h)(1)–(h)(3)	Notification of Compliance Status	Yes	
§63.9(h)(4)		No	
§63.9(h)(5)–(h)(6)	Notification of Compliance Status	Yes	
§63.9(i)	Adjustment of Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	Recordkeeping/Reporting General Requirements	Yes	See §§63.7131 through 63.7133.
§63.10(b)(1)–(b)(2)(xii)	Records	Yes	

§63.10(b)(2)(xiii)	Records for Relative Accuracy Test	No	
§63.10(b)(2)(xiv)	Records for Notification	Yes	
§63.10(b)(3)	Applicability Determinations	Yes	
§63.10(c)	Additional CMS Recordkeeping	No	See §63.7132.
§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	Yes	
§63.10(d)(3)	Opacity or VE Observations	Yes	For the periodic monitoring requirements in Table 6 to subpart AAAAA, report according to §63.10(d)(3) only if VE observed and subsequent visual opacity test is required.
§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)	Startup, Shutdown, Malfunction Reports	Yes	
§63.10(e)	Additional CMS Reports	No	See specific requirements in subpart AAAAA, see §63.7131.
§63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
§63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
§63.12(a)–(c)	State Authority and Delegations	Yes	
§63.13(a)–(c)	State/Regional Addresses	Yes	
§63.14(a)–(b)	Incorporation by Reference	No	
§63.15(a)–(b)	Availability of Information	Yes	

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a
Part 70 (Title V) Operating Permit Renewal

Source Description and Location

Source Name:	Carmeuse Lime, Inc.
Source Location:	I North Carmeuse Drive, Gary, IN 46406
County:	Lake
SIC Code:	3274
Permit No.:	T089-27040-00112
Permit Reviewer:	Donald McQuigg

On July 24, 2009, the Office of Air Quality (OAQ) had a notice published in The Gary Post Tribune in Merrillville, Indiana and The Times in Munster, Indiana stating that Carmeuse Lime, Inc. had applied for a Part 70 Operating Permit renewal for a stationary lime manufacturing plant. The notice also stated that OAQ proposed to issue a Part 70 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.

Changes to the permit are noted as follows: ~~struck~~ language has been deleted; **bold** language has been added. If necessary, the Table of Contents will be modified to reflect these changes.

Necessary changes will be noted in this addendum only, as no changes are made to the TSD after public notice.

Comments on the proposed Part 70 operating permit renewal were received on September 10, 2009, from Ms. Barbara Hodgson representing Carmeuse Lime, Inc.

Comment #1

Lime Storage System, Permit Conditions A.2(q) and D.2(q)
The draft permit incorrectly describes emission unit EU-14, Lime Storage System (Old Side). There are eight (8) tanks that comprise this emission unit. Although these are not enforceable permit conditions, they should be corrected as indicated.

Response to Comment #1

Clarifications to the affected conditions have been made as follows:

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:

****

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of ~~seven~~ **eight** (~~7~~ **8**) lime storage tanks; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6; and baghouse CE-13 (ALG320) exhausting to stack S-13.

****

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

****

Lime Storage and Loadout

****

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of ~~seven~~ **eight** (~~7~~ **8**) lime storage tanks; emissions controlled by baghouses CE-6 (ALG400) and CE-13 (ALG320); exhausting to stack S-6 and stack S-13.

****

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

Comment #2

Continuous Compliance Plan, Permit Condition C.11(a)
This permit condition states that Carmeuse Lime, Inc. shall submit a copy of its Continuous Compliance Plan to IDEM. For clarification, Carmeuse Lime, Inc. requests that the permit state that Carmeuse Lime, Inc. has submitted its Continuous Compliance Plan.

Response to Comment #2

Clarifications to the affected conditions have been made as follows:

C.11 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8)]

(a) **The Permittee has submitted its Continuous Compliance Plan (CCP).** Pursuant to ~~326 IAC~~ 326 IAC 6.8-8-1, the Permittee shall ~~submit to IDEM and~~ maintain at **the** source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

****

Comment #3

Stack Testing Schedule, Permit Conditions D.1.6(a) and (b)
Carmeuse Lime, Inc. requests that the schedule for testing Kilns 1-5 for PM/PM_{10} and SO_2 be changed from once every 2.5 years to once every 5 years to coincide with the Lime MACT requirement to test the kilns every 5 years. Additionally, Carmeuse Lime, Inc. requests that the schedule allow a window of 6-months after the deadline within which to perform the testing. Currently, Carmeuse Lime, Inc. must perform stack testing months before the actual deadline to assure that the testing will be completed before the deadline. As a result, Carmeuse Lime, Inc. is performing stack testing about every 2 years.

Response to Comment #3

Pursuant to 326 IAC 2-7-6, each Part 70 permit shall include sufficient testing, monitoring, reporting and recordkeeping to ensure continuous compliance with the terms and conditions of the Part 70 permit. However, IDEM understands the difficulty in scheduling and coordinating compliance stack testing. Therefore, the kiln stack test requirement in the current permit renewal will allow Carmeuse Lime, Inc. 30 months to complete stack testing for all kilns. Based on the current stack testing schedules, Carmeuse Lime, Inc. should be able to coordinate stack tests with OAQ Compliance Data Section, such that stack test data for SIP compliance can be coordinated with the Lime MACT testing requirement.

No changes have been made as a result of this comment.

Comment #4

Sampling and Analysis of Limestone and Coal, Permit Condition D.1.7(a)(1)
The permit states that the certified analyses that accompany each shipment of limestone and coal received at the plant shall be the source of the data used in the sulfur emissions calculations. Nevertheless, a sampling and analysis protocol is set out in Condition D.1.7(a)(1)(A) through (E). For clarification, Carmeuse Lime, Inc. requests the inclusion of language stating that the sampling and analysis protocol is to be used, if necessary, when certified analyses are not available. The proposed permit condition reads as follows:

> "Pursuant to 326 IAC 7-4.1-2(c), the current sampling and analysis protocol *to be used in lieu of certified analyses* is as follows...."

Response to Comment #4

Clarifications to the affected conditions have been made as follows:

D.1.7 SO_2 Emissions [326 IAC 7-4.1-2][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4.1-2 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO_2 limits in Condition D.1.2 using one of the following options:

(a) Sampling, Analysis, and Calculations.

(1) Each shipment of limestone and coal is sampled and analyzed by an independent laboratory, utilizing American Society for Testing and Materials (ASTM) standards for sampling and chemical analyzes. The certified analyses that accompany each shipment shall be the source of the data of the sulfur content in both the limestone and coal. Pursuant to 326 IAC 7-4.1-2(c), the current sampling and analysis protocol **to be used in lieu of certified analyses** is as follows:

****

Comment #5

Subparagraph Numbering, Permit Condition D.2.1(a)
The subparagraphs under Permit Condition D.2.1(a) should be numbered (1) through (3) rather than (a) through (c).

Response to Comment #5

Clarifications to the affected conditions have been made as follows:

D.2.1 Prevention of Significant Deterioration (PSD) and Emission Offset (EO) - Particulate [326 IAC 2-2] [326 IAC 2-3]

(a) Pursuant to 089-6140-00112, issued June 29, 2004:

(~~a~~ **1**) The PM emissions from pugmill EU-18 shall not exceed 0.186 pounds per ton of lime processed.

(~~b~~ **2**) The PM emissions from pugmill EU-19 shall not exceed 0.186 pounds per ton of lime processed.

(~~c~~ **3**) 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.

****

Comment #6

Emission Unit EU-25, Permit Conditions D.2.1(b) and (c)
Permit Conditions D.2.1(b) and (c) refer to the same emission unit by different names. The name of this unit as it appears in CP 089-5851-00112 is "Rescreen Loadout #2." Lime Loadout #3 (East Bay) is a different name for the same

emission unit. One of these permit conditions should be removed from the permit. The removal of Condition D.2.1(c) is preferred.

Response to Comment #6

Clarifications to the affected conditions have been made as follows:

D.2.1 Prevention of Significant Deterioration (PSD) and Emission Offset (EO) - Particulate [326 IAC 2-2] [326 IAC 2-3]

****

(b) **Pursuant to CP 089-5851-00112, issued December 9, 1996, ~~T~~t**he PM/PM_{10} emissions from Lime Loadout #3 (East Bay) (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.

~~(c)~~ ~~Pursuant to CP 089-5851-00112, issued December 9, 1996, the PM/PM_{10} emissions from Re-Screen Loadout #2 (EU-25) shall not exceed 3.4 pounds per hour and 15 tons per year.~~

(~~d~~ **c**) Pursuant to MSM 089-23502-00112, issued on November 17, 2006:

****

Comment #7

Visible Emission Notations, Dust Collectors, Permit Condition D.2.7(a)
Permit Condition D.2.7(a) requires Carmeuse Lime, Inc. to perform visible emission notations on the stack exhausts of certain emission units, "once per day during normal daylight operations". For clarification, Carmeuse Lime, Inc. requests that the permit specify that the visible emission notations must be performed only when the emission unit is operating.

Response to Comment #7

The permit condition D.2.13(b) states that to document compliance with Condition D.2.7, the Permittee shall maintain a daily record of the visible emission notations of the stack exhaust from facilities 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, EU-32, EU-41 and EU-43, as required by Condition D.2.7. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process or facility did not operate that day). IDEM, OAQ considers the last statement adequate to address the Permittee comment.

No changes have been made to the permit as a result of this comment.

Comment #8

Volatile Organic Compounds, Permit Condition D.3.4(a) and (d)(1)
The parts washer was installed after 1999. Therefore, Permit Conditions D.3.4(a) and (d)(1) are not applicable to this facility.

Response to Comment #8

In additional information received on May 5, 2009, Carmeuse Lime, Inc. stated that a cold cleaner degreaser without a solvent reservoir was installed on September 2, 2008. Pursuant to 326 IAC 8-3-1(a)(2), any new cold cleaning facilities after January 1, 1980, performing organic solvent degreasing located anywhere in the state, are subject to 326 IAC 8-3-2. Pursuant to 326 IAC 8-3-1(c), any user, provider, or manufacturer of solvents for use in cold cleaner degreasers in Clark, Floyd, Lake, and Porter counties, except for solvents intended to be used to clean electronic components, are subject to 326 IAC 8-3-8.

No changes have been made to the permit as a result of this comment.

Comment #9

SO_2 Emissions Reporting, Permit Conditions D.1.7(a)(3) and D.1.13(b)
Permit Condition D.1.13(b) requires Carmeuse Lime, Inc. to submit a quarterly summary of information documenting compliance with the SO_2 emission limits in Condition D.1.7 using the report forms contained in the permit. The applicable reporting forms, which are designated as Part 70 Monthly Reports, are incorrect and are not suitable for reporting SO_2 emissions under this permit.

Response to Comment #9

The following changes are made to implement the revised reporting requirements:

D.1.7 SO_2 Emissions [326 IAC 7-4.1-2][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4.1-2 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO_2 limits in Condition D.1.2 using one of the following options:

(a) Sampling, Analysis, and Calculations.

****

(3) The Permittee shall determine the calendar month SO_2 emissions from each kiln for the ~~monthly~~ **quarterly** report~~s~~ by the following calculation using the input values determined in D.1.7(a)(1) and D.1.7(a)(2) above:

****

~~**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**~~
~~**OFFICE OF AIR QUALITY**~~
~~**Compliance and Enforcement Branch**~~

~~**Part 70 Monthly Report**~~

~~Source Name: Carmeuse Lime, Inc.~~
~~Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Part 70 Permit No.: T089-27040-00112~~
~~Facility: Rotary Kilns #1 through #5 (EU-1 through EU-5)~~
~~Parameter: Sulfur Dioxide (SO_2) Emissions~~
~~Limit: 240 pounds of SO_2 per hour (total)~~

~~Time/ Date of Sample~~	~~SO2 Emissions from EU-1* (lb/hr)~~	~~SO2 Emissions from EU-2* (lb/hr)~~	~~SO2 Emissions from EU-3* (lb/hr)~~	~~SO2 Emissions from EU-4* (lb/hr)~~	~~SO2 Emissions from EU-5* (lb/hr)~~	~~Total SO2 Emissions (lb/hr)~~

~~* The pound per hour SO2 emission rates presented in this table should be equivalent to those presented in the reporting forms found on the following pages.~~

~~☐ No deviation occurred in this month.~~
~~☐ 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 and Enforcement Branch~~

~~Part 70 Monthly Report~~

~~Source Name:~~ ~~Carmeuse Lime, Inc.~~
~~Source Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Mailing Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Part 70 Permit No.:~~ ~~T089-27040-00112~~
~~Facility:~~ ~~Rotary Kiln #1 (EU-1)~~
~~Parameter:~~ ~~Sulfur Dioxide (SO_2) Emissions~~
~~Limit:~~ ~~(A) When three (3) or fewer kilns are in operation at the same time: two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and forty-eight (48) pounds per hour per operating kiln.~~
~~(B) When four (4) kilns are in operation at the same time: one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and forty (40) pounds per hour per operating kiln.~~
~~(C) When four (4) kilns are in operation at the same time: one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.~~
`

~~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)~~	~~SO2 Emissions (lb/hr)~~

☐ ~~No deviation occurred in this month.~~
☐ ~~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 and Enforcement Branch~~

~~Part 70 Monthly Report~~

~~Source Name:~~ ~~Carmeuse Lime, Inc.~~
~~Source Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Mailing Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Part 70 Permit No.:~~ ~~T089-27040-00112~~
~~Facility:~~ ~~Rotary Kiln #2 (EU-2)~~
~~Parameter:~~ ~~Sulfur Dioxide (SO_2) Emissions~~
~~Limit:~~ ~~(A) When three (3) or fewer kilns are in operation at the same time: two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and forty-eight (48) pounds per hour per perating kiln.~~
~~(B) When four (4) kilns are in operation at the same time: one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and forty (40) pounds per hour per operating kiln.~~
~~(C) When four (5) kilns are in operation at the same time: one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.~~

~~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)~~	~~SO2 Emissions (lb/hr)~~

☐ ~~No deviation occurred in this month.~~
☐ ~~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 and Enforcement Branch~~

~~Part 70 Monthly Report~~

~~Source Name:~~ ~~Carmeuse Lime, Inc.~~
~~Source Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Mailing Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Part 70 Permit No.:~~ ~~T089-27040-00112~~
~~Facility:~~ ~~Rotary Kiln #3 (EU-3)~~
~~Parameter:~~ ~~Sulfur Dioxide (SO_2) Emissions~~
~~Limit:~~ ~~(A) When three (3) or fewer kilns are in operation at the same time: two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and forty-eight (48) pounds per hour per perating kiln.~~
~~(B) When four (4) kilns are in operation at the same time: one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and forty (40) pounds per hour per operating kiln.~~
~~(C) When four (5) kilns are in operation at the same time: one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.~~

~~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)~~	~~SO2 Emissions (lb/hr)~~

☐ ~~No deviation occurred in this month.~~
☐ ~~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 and Enforcement Branch

Part 70 Monthly Report

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112
Facility: Rotary Kiln #4 (EU-4)
Parameter: Sulfur Dioxide (SO_2) Emissions
Limit: (A) When three (3) or fewer kilns are in operation at the same time: two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and forty-eight (48) pounds per hour per perating kiln.
(B) When four (4) kilns are in operation at the same time: one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and forty (40) pounds per hour per operating kiln.
(C) When four (5) kilns are in operation at the same time: one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.

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)	SO2 Emissions (lb/hr)

☐ No deviation occurred in this month.
☐ 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 and Enforcement Branch~~

~~Part 70 Monthly Report~~

~~Source Name:~~ ~~Carmeuse Lime, Inc.~~
~~Source Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Mailing Address:~~ ~~1 North Carmeuse Drive, Gary, Indiana 46406~~
~~Part 70 Permit No.:~~ ~~T089-27040-00112~~
~~Facility:~~ ~~Rotary Kiln #5 (EU-5)~~
~~Parameter:~~ ~~Sulfur Dioxide (SO_2) Emissions~~
~~Limit:~~ ~~(A) When three (3) or fewer kilns are in operation at the same time: two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and forty-eight (48) pounds per hour per perating kiln.~~
~~(B) When four (4) kilns are in operation at the same time: one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and forty (40) pounds per hour per operating kiln.~~
~~(C) When four (5) kilns are in operation at the same time: one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.~~

~~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)~~	~~SO2 Emissions (lb/hr)~~

☐ ~~No deviation occurred in this month.~~
☐ ~~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 and Enforcement Branch

Part 70 Quarterly Report

Source Name: Carmeuse Lime, Inc.
Source Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Mailing Address: 1 North Carmeuse Drive, Gary, Indiana 46406
Part 70 Permit No.: T089-27040-00112
Facility: Rotary Kilns#1- 5 (EU-1 through EU-5)
Parameter: Sulfur Dioxide (SO_2) Emissions
Limit: forty-eight (48) pounds per hour per operating kiln when three (3) or fewer kilns are in operation at the same time; forty (40) pounds per hour per operating kiln when four (4) kilns are in operation at the same time; thirty-four (34) pounds per hour per operating kiln when four (5) kilns are in operation at the same time.

	Month_____					Month_____					Month_____				
	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)	Kiln 1 (EU-1)	Kiln 2 (EU-2)	Kiln 3 (EU-3)	Kiln 4 (EU-4)	Kiln 5 (EU-5)
Kiln Scrubbing Factor (KSF)															
Date of Stack Test for KSF															
Average S Content of Limestone (wt%S)															
Average Throughput of Limestone (tons)															
Average S Content of Coal (wt%S)															
Average Throughput of Coal (tons)															
Average SO_2 Emissions (lb/hr)															
	Monthly Average SO_2 Emissions (lb/hr)_____					Monthly Average SO_2 Emissions (lb/hr)_____					Monthly Average SO_2 Emissions (lb/hr)_____				

☐ No deviation occurred this quarter
☐ Deviation/s occurred this quarter. Deviation has been reported on: _____
Submitted by: _____ Signature: _____
Title/position: _____ Date: _____
Phone: _____

Attach a signed certification to complete this report.

The table entry on page 10 in the TSD summarizing the potential to emit SO_2 of all five (5) kilns, in aggregate, shall now be 744.6 tons/year. The footnote (b) to this table shall now read: Pursuant to 326 IAC 7-4.1-6, when all five (5) kilns are in operation, the maximum allowable SO_2 emissions is 744.6 tons/year.

IDEM, OAQ acknowledges these changes in the TSD addendum. 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 #10

Insignificant Activities Listed in the Technical Support Document
Carmeuse's permit application listed five diesel "generators" used for providing emergency power to each kiln rotor and cited 326 IAC 2-7-1(21)(G)(xxii)(BB)(bb) as the appropriate definition for this insignificant activity. The consultants who prepared the application inadvertently erred in referring to this equipment as "generators." The equipment, in fact, consists of five stationary diesel-fired internal combustion engines used for providing emergency power to the rotary kilns.

Response to Comment #10

IDEM, OAQ acknowledges that this descriptive change does not alter the applicability analysis of the diesel engines for the permit. 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. This Addendum to the Technical Support Document becomes part of the Technical Support Document.

Comment #11

Insignificant Activities Listed in the Technical Support Document
The list of insignificant activities on page 4 of the Technical Support Document (TSD) does not match the list in Permit Conditions A.3 and D.3. The following insignificant activities are not contained in the permit, were not included in Carmeuse's permit application and should be removed from the TSD:

(c) Combustion source flame safety purging on startup;
(f) Refractory storage not requiring air pollution control equipment;
(g) Cleaners and Solvents;
(h) Closed loop heating and cooling systems;
(j) VOC and HAP storage.

Response to Comment #11

IDEM, OAQ only includes the specifically regulated insignificant activities in the Permit; whereas, the TSD includes the list of all insignificant activities at the source. The insignificant activities referred to in the comment are listed in the TSD document for the prior Title V permit T089-6140-00112. The Title V application for the current Title V permit renewal indicated that Carmeuse Lime, Inc. has reviewed its facility records and there were no insignificant activities added since the prior Title V permit T089-6140-00112. However, there were several insignificant activities which were inadvertently left out of the prior Title V permit T089-6140-00112, which were included in the current permit renewal. With the exception of these insignificant activities, the remaining facility and emission unit information addressed in the Title V permit T089-6140-00112 application has not changed.

No changes have been made to the permit as a result of this comment.

Comment #12

Testing Requirements Section of the Technical Support Document
The testing requirements section of the TSD states that testing shall be conducted within 180 days of publication of EPA's new or revised condensable PM test methods. It appears that this refers to PM_{10} testing for the kilns. There is no condition in the permit containing this requirement.

A requirement to perform testing within 180 days of an unknown publication date is too uncertain and prevents Carmeuse Lime, Inc. from adequately planning for such costly testing.

Response to Comment #12

This is standard language that OAQ is including in the TSD but not the permit. It is more informative in nature and may not apply to this situation. However, in the event that the EPA review of the particulate test methods results in revisions of Method 201 or 201A, this extended compliance demonstration period provides the Permittee with more stack test scheduling flexibility.

IDEM Contact

(a) Questions regarding this proposed Part 70 Operating Permit can be directed to Donald McQuigg at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-4240 or toll free at 1-800-451-6027 extension 4-4240.

(b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Carmeuse Lime, Inc.
Source Location:	1 North Carmeuse Drive, Gary Indiana 46406
County:	Lake
SIC Code:	3274
Permit Renewal No.:	T089-27040-00112
Permit Reviewer:	Donald McQuigg

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Carmeuse Lime, Inc., relating to the operation of a stationary lime manufacturing plant.

History

On September 30, 2008, Carmeuse Lime, Inc. submitted an application to the OAQ requesting to renew its operating permit. Carmeuse Lime, Inc. was issued a Part 70 Operating Permit Renewal on June 29, 2004. This source was previously known, and referred to in 326 IAC 6.8, as Marblehead Lime Company.

Permitted Emission Units and Pollution Control Equipment

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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(f) Processed stone handling operations, identified as EU-50, consisting of three (3) drop points into Stone Tanks 1, 2, and 3, each enclosed within a building; three (3) drop points from the Stone Tanks to a conveyor, each enclosed within a building, and five (5) drop points from the stone belt to Kilns 1-5, each enclosed within a building. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

Lime Processing and Handling

(g) One (1) Lime Grinder Handling System; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6.

(h) 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 (ALG450); exhausting to stack S-8.

(i) 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 (ALG460); exhausting to stack S-7.

(j) 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 pugmill scrubber CE-19; exhausting to stacks S-19.

(k) 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 pugmill scrubber CE-20; exhausting to stack S-20.

(l) One (1) Lime Handling System #1 (302 Belt); identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(m) One (1) Lime Handling System #2 (301 Belt); identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15 (ALG300); exhausting to stack S-15.

(n) One (1) Lime Transfer System #1, identified as EU-40/41, approved for construction in 2006, with a maximum capacity of 55 tons of lime per hour, consisting of a hopper, piping and storage tank T4, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-40 (ALG-490) and S-41 (ALG-430), respectively.

(o) One (1) Lime Transfer System #2, identified as EU-42/43, approved for construction in 2006, with a maximum capacity of 80 tons of lime per hour, consisting of a hopper, piping and storage tank T1A, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-42 (ALG-470) and S-43 (ALG-410), respectively.

Lime Storage and Loadout

(p) One (1) Lime Storage System (New Side); identified as EU-24; constructed prior to 1977; consisting of six (6) lime storage tanks; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of eight (8) lime storage tanks; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6.

(r) One (1) Lime Loadout #2A (Center Bay); 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.

(s) 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 (AKG450); exhausting to stack S-9.

(t) 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 (AKG141); exhausting to stack S-10.

(u) One (1) Lime Loadout #2B (Center Bay); identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(v) One (1) Lime Loadout #1 (West Bay); identified as EU-11; constructed prior to 1977; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(w) One (1) Lime Loadout #2 (East Bay); identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(x) 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 (ALG606CA); exhausting to stack S-32.

Raw Material Storage and Handling (Fugitive)

(y) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions.

(z) 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.

(aa) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions.

(bb) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge or boat unloading and assorted conveyors; a source of fugitive emissions.

(cc) One (1) Kiln 1 exhaust dust chamber, identified as EU-44, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(dd) One (1) Kiln 2 exhaust dust chamber, identified as EU-45, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(ee) One (1) Kiln 3 exhaust dust chamber, identified as EU-46, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(ff) One (1) Kiln 4 exhaust dust chamber, identified as EU-47, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(gg) One (1) Kiln 5 exhaust dust chamber, identified as EU-48, consisting of three (3) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions.

(hh) One (1) lime dust storage pile, identified as EU-49, with a capacity of 18,000 tons; a source of fugitive emissions.

Emission Units and Pollution Control Equipment Removed From the Source

(a) One (1) Truck Lime Loadout #4, identified as EU-9; constructed in 1994; a maximum capacity of two hundred (200) tons of lime per hour; emissions controlled by baghouse CE-17, exhausting to one (1) stack, identified as S17.

(b) Baghouse CE-10, control device for EU-17, was replaced in 2009 as a result of normal wear and tear. The replacement control device will be an FLS Airtech Model C jet pulse baghouse which has similar specifications to the existing baghouse. The new baghouse will result in emissions that are equal to or less than the current permitted emissions for EU-17. Pursuant to 326 IAC 2-7-10.5(b), the equipment change is incorporated in this renewal.

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 6.8-10]

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Five (5) furnaces, four (4) rated at 0.12 MMBtu per hour and one (1) rated at 0.075 MMBtu per hour, for providing space heat [326 IAC 6.8-1-2(a)];

(c) Combustion source flame safety purging on startup.

(d) 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.

(e) 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.

(f) Refractory storage not requiring air pollution control equipment.

(g) 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.

(h) Closed loop heating and cooling systems.

(i) 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.

(j) Diesel generators not exceeding one thousand six hundred (1,600) horsepower. Five (5) emergency diesel generators, each with an output rating of 60 KW (80.5 hp) and 3.87 liter cylinder displacement volume, to supply emergency power to each of the kiln rotors, operating no more than 500 hrs per year and venting to the atmosphere; emergency diesel generators, EG-1 and EG-2, were installed in 1966 for Rotary Kiln EU-1 and EU-2, respectively; emergency diesel generator EG-3 was installed in 1968 for Rotary Kiln EU-3, and; emergency diesel generators, EG-4 and EG-5, were installed in 1972 for Rotary Kiln EU-4 and EU-5, respectively;

(k) Two (2) diesel fuel storage tanks, one (1) 10,000 gallon stationary tank and one (1) 300 gallon portable tank, both installed prior to 2001, handling less than or equal to three thousand five hundred (3,500) gallons, each with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)];

(l) One (1) 300 gallon gasoline storage tank, installed prior to 2007, handling less than or equal to one thousand three hundred (1,300) gallons, with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)]; and

(m) One (1) parts washer without a remote solvent reservoir, installed September 2008, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38^0C) [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8].

Existing Approvals

Since the issuance of the Part 70 Operating Permit T089-6140-00112 on June 29, 2004, the source has constructed or has been operating under the following approvals as well:

(a) Significant Permit Modification No. 089-23750-00112, issued on June 7, 2007;

(b) Significant Source Modification No. 089-23753-00112, issued on March 14, 2007;

(c) Minor Permit Modification No. 089-23502-00112, issued on November 17, 2006; and

(d) Administrative Amendment No. 089-23750-00112, issued on February 28, 2006.

All terms and conditions of 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 been revised in this Part 70 Operating Permit Renewal:

(a) Condition D.1.3-Volatile Organic Compounds (VOCs) [326 IAC 8-7]

The VOC emission limit for the rotary kilns EU-1 through EU-5 was calculated in the original Part 70 permit using a rolling 12-month lime production limit of 999,000 tons; however, when the daily lime production limit per kiln of 450 tons is applied over all five kilns and 365 days, the daily lime production limit is equivalent to 821,500 tons of lime per twelve consecutive month period. The VOC limit, updated to reflect the revised production rate, is changed to 0.06 lbs VOC/ton lime produced.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O_3	Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for $PM_{2.5}$.	

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph Counties as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby Counties as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(i) 1-hour ozone standard

On December 22, 2006, the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.

On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(ii) 8-hour ozone standard

VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for $PM_{2.5}$. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for $PM_{2.5}$ promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since this source is classified as a stationary lime manufacturing plant, it is considered to be in one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is in one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	greater than 250
PM_{10}	greater than 250
$PM_{2.5}$	greater than 250
SO_2	greater than 250
VOC	greater than 25
CO	greater than 100
NO_x	greater than 250

HAPs	tons/year
HCl	greater than 25
miscellaneous HAPs from coal combustion	less than 10 for each HAP
Total	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM_{10}, SO_2, CO, and NO_x is 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 2-7-1(29)) of any 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 of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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.

Potential to Emit After Issuance

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

	Potential to Emit (tons/year)							
Process/ Emission Unit	**PM**	**$PM_{2.5}$**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPS**
Rotary Lime Kiln #1 (EU-1)	86.8	43.6 [a]	43.6 [a]	1052[b]	less than 25 [c]	153	316	49
Rotary Lime Kiln #2 (EU-2)	86.8	43.6 [a]	43.6 [a]			153	316	49
Rotary Lime Kiln #3 (EU-3)	86.8	43.6 [a]	43.6 [a]			153	316	49
Rotary Lime Kiln #4 (EU-4)	86.8	43.6 [a]	43.6 [a]			153	316	49
Rotary Lime Kiln #5 (EU-5)	86.8	43.6 [a]	43.6 [a]			153	316	49
Lime Grinder (EU-15)	1.93	1.93	1.93	-	-	-	-	-
Lime Storage System (EU-14)				-	-	-	-	-
Grinding Mill #2 (EU-12)	0.22	0.22	0.22	-	-	-	-	-
Grinding Mill #1 (EU-13)	0.22	0.22	0.22	-	-	-	-	-
Pugmill #1 (EU-18)	less than 25 [d][g]	less than 25	less than 25	-	-	-	-	-
Pugmill #2 (EU-19)				-	-	-	-	-
Lime Handling System #1 (EU-6)	1.14	1.14	1.14	-	-	-	-	-
Lime Storage System (EU-24)				-	-	-	-	-
Rail Lime Loadout #2 (EU-28)				-	-	-	-	-
Lime Handling System #2 (EU-7)	0.79	0.79	0.79	-	-	-	-	-
Truck and Rail Lime Loadout #3 (EU-8)	0.22	0.22	0.22	-	-	-	-	-
Truck Lime Loadout #4 (EU-9)	< 15 [g]	< 15 [g]	< 15 [g]	-	-	-	-	-
Truck Loadout Station (EU-11)	0.57	0.57	0.57	-	-	-	-	-
Rail Re-Screen Loadout #2 (EU-25)	< 15 [g]	< 15 [g]	< 15 [g]	-	-	-	-	-
Truck Flue Dust Loadout #1 (EU-17)	0.48	0.48	0.48	-	-	-	-	-
Truck Flue Dust Loadout #2 (EU-16)	0.44	0.44	0.44	-	-	-	-	-
Truck Transfer Station Reclaim Hopper (EU-32)	0.75 [g]	0.75 [g]	0.75 [g]	-	-	-	-	-
Lime Transfer System #1 (EU-40&41)	3.88	3.88	3.88	-	-	-	-	-
Lime Transfer System #2 (EU-42&43)	3.88	3.88	3.88	-	-	-	-	-
Fugitive Emissions	Und.	Und.	Und.	-	-	-	-	-
Insignificant Activities	Und.	Und.	Und.	0.10	negl.	negl.	0.30	negl.
Emergency Diesel Generators (EG1-EG5)	0.22	0.22	0.22	0.21	0.25	0.67	3.12	negl.
Total	**< 508.3**	**< 288.3**	**< 288.3**	**1052.3**	**< 25**	**765.7**	**1583.5**	**245**
Major Source Threshold	**250**	**100**	**100**	**100**	**25**	**100**	**100**	**25**

Negl. - Negligible emissions, less than 0.01 tons per year.
Und. - Undetermined
"-" denotes no emissions of designated pollutant
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 = PM_{10} for all operations (except for the rotary kilns) and that PM_{10} = $PM_{2.5}$ for all operations.
(a) The PM_{10} emissions from these facilities are limited pursuant to 326 IAC 6.8-2-22. 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 SO_2 emissions from all kilns shall not exceed 240 lb/hr. This is equivalent to 1052 tons of SO_2 per year at 8760 hr/yr.
(c) The VOC emissions from each kiln shall not exceed 0.06 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/PM_{10} 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/PM_{10} 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 6.8-2, the particulate matter emission from these facilities is limited to 0.03 gr/dscf.

(a) This existing stationary source is major for Emission Offset and/or Nonattainment NSR because the emissions of the nonattainment pollutant, $PM_{2.5}$, are greater than one hundred (>100) tons per year.

Federal Rule Applicability

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE[1)] tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU-6/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-7/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-8/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-11/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-12/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-13/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-14/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-15/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-16/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-17/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-18/PM_{10}&$PM_{2.5}$	scrubber	Y	<100	<100	100	N	N
EU-19/PM_{10}&$PM_{2.5}$	scrubber	Y	<100	<100	100	N	N
EU-24/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-25/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-28/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-32/PM_{10}&$PM_{2.5}$	baghouse	Y	<100	<100	100	N	N
EU-40&41/ PM_{10}&$PM_{2.5}$	vent filter	Y	<100	<100	100	N	N
EU-42&43/ PM_{10}&$PM_{2.5}$	vent filter	Y	<100	<100	100	N	N

1) emissions determined from emission factors calculated using equation from AP-42, Section 13.2.4.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

(a) The requirements of the New Source Performance Standard for Lime Manufacturing Plants, 40 CFR 60.340, Subpart HH, are not included in the permit for the rotary lime kilns, identified as EU-1 through EU-5. Construction of these units commenced prior to the applicability date of May 3, 1977.

(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 two (2) insignificant diesel fuel and one (1) 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 each tank has a capacity less than 40 m^3 (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) Pursuant to 40 CFR 60.4200(2), this source is not subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200, Subpart IIII, which is incorporated by reference as 326 IAC 12-1. The Permittee operates a lime manufacturing plant that is a major source of hazardous air pollutant (HAP) emissions. This source utilizes emergency diesel generators, identified as EG-1 through EG-5 to supply backup power to the rotary kilns. However, all five (5) emergency generators were installed prior to the applicability date of July 11, 2005.

(f) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants 40 CFR 63.7081, Subpart AAAAA, which is incorporated by reference as 326 IAC 20-91. The compliance date for the source is January 5, 2007. The Permittee operates a lime manufacturing plant that is a major source of hazardous air pollutant (HAP) emissions.

Pursuant to 40 CFR 63.7081, the affected source that is subject to the requirements of 40 CFR 63, Subpart AAAAA consists of the five (5) rotary kilns, identified as EU-1 through EU-5, and all processed stone handling (PSH) operations, identified as EU-50, including all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. The affected PSH operations include man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors. Any open storage piles, coal storage piles, or coal handling facilities are specifically excluded from the requirements of 40 CFR 63, Subpart AAAAA.

The facilities subject to this rule include the following:

(1) 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(2) 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(3) 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(4) 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(5) 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 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. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

(6) Processed stone handling (PSH) operations, identified as EU-50, consisting of three (3) drop points into Stone Tanks 1, 2, and 3, each enclosed within a building; three (3) drop points from the Stone Tanks to a conveyor, each enclosed within a building, and five (5) drop points from the stone belt to Kilns 1-5, each

enclosed within a building. Under 40 CFR Part 63, Subpart AAAAA, this is considered an existing affected facility.

Non-applicable portions of the NESHAP will not be included in the permit. The five (5) rotary kilns, identified as EU-1 through EU-5 and the processed stone handling (PSH) operations, identified as EU-50, are subject to the following portions of Subpart AAAAA:

(1) 40 CFR 63.7081
(2) 40 CFR 63.7082
(3) 40 CFR 63.7083(a)(1),(b), (d)
(4) 40 CFR 63.7090
(5) 40 CFR 63.7100
(6) 40 CFR 63.7110(a), (d), (e)
(7) 40 CFR 63.7111
(8) 40 CFR 63.7112
(9) 40 CFR 63.7113
(10) 40 CFR 63.7114
(11) 40 CFR 63.7120
(12) 40 CFR 63.7121
(13) 40 CFR 63.7130
(14) 40 CFR 63.7131
(15) 40 CFR 63.7132
(16) 40 CFR 63.7133
(17) 40 CFR 63.7140
(18) 40 CFR 63.7141
(19) 40 CFR 63.7143
(20) 40 CFR 63, Subpart AAAAA, Tables 1 - 7

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 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. The source belongs to 1 of the 28 PSD source categories with a 100 ton per year threshold.

(a) Carmeuse constructed pugmills EU-18 and EU-19 in 1985; however, it did not receive prior approval. Pursuant to T089-6140-00112, issued on June 29, 2004, the following limitations apply to pugmills EU-18 and EU-19 in order to render the requirements of 326 IAC 2-2 not applicable:

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

(2) The PM emissions from pugmill EU-19 shall not exceed 0.186 pound per ton of lime processed.

(3) 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 twenty-five (25) tons per year and will render the requirements of 326 IAC 2-2 not applicable.

(b) On September 19, 1994, Carmeuse was issued CP 089-3753-00112 to permit the construction and operation of Truck Lime Loadout #4 (EU-9):

(1) 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.

(c) On December 9, 1996, Carmeuse was issued CP 089-5851-00112 to permit the construction and operation of Re-Screen Loadout #2 (EU-25):

(1) Pursuant to CP 089-5851-00112, issued December 9, 1996, the PM/PM_{10} 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.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source is located in Lake County and emits oxides of nitrogen into the ambient air at levels greater than twenty-five (25) tons per year and is required to have an operating permit under 326 IAC 2-7(Part 70). The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1 beginning in 2004 and every year after. Therefore, the next emission statement for this source must be submitted by July 1, 2009. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-4.1 (Hazardous Air Pollutants)

Even though the Permittee is a major source of HAPs, the source is not subject to the requirements of 326 IAC 2-4.1 because none of its facilities were constructed after the applicability date of July 27, 1997.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2(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 the permit:

(a) Opacity from a facility located in Lake County shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period unless otherwise specified in 326 IAC 6-1-10.1.

(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 6-4 (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 twenty-five (25) tons per year which received a preconstruction approval after December 13, 1985.

326 IAC 6.8-2 (Lake County: PM_{10} Emission Requirements)

This source is subject to the requirements of 326 IAC 6.8-2, 326 IAC 6.8-4, and 326 IAC 6.8-8 because it is specifically listed in 326 IAC 6.8-2-22.

326 IAC 6.8-4 (Lake County: Opacity Limits; Test Methods)

Pursuant to 326 IAC 6.8-4-1, test methods for 326 IAC 6.8-2 through 326 IAV 6.8-8 shall be as follows:

(a) Emissions of PM_{10} shall be measured by any of the following:

(1) 40 CFR 51, Appendix M, Method 201.

(2) 40 CFR 51, Appendix M, Method 201A.

(3) The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR 60, Appendix A, Method 1, 1A, 2, 2A, 2C, 3, and 4.

(b) Emissions of TSP matter shall be measured by any of the following:

(1) 40 CFR 60, Appendix A, Methods 5, 5A, 5D, 5E, or 17. Method 17 may not be used when the stack gas temperature exceeds two hundred forty-eight (248) degrees Fahrenheit (+/- 25^0F).

(2) The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, or 4.

(c) Measurements of opacity shall be conducted in accordance with the following:

(1) 40 CFR 60, Appendix A, Method 9, except for those sources where a three (3) minute averaging time is required.

(2) Sources requiring a three (3) minute averaging time are subject to all parts of Method 9 except the six (6) minute averaging provision. In these cases, the opacity shall be determined as an average of twelve (12) consecutive observations recorded at fifteen (15) second intervals.

(d) Emissions of sulfuric acid mist shall be measured in accordance with 40 CFR 60, Appendix A, Method 8.

326 IAC 6.8-8 (Lake County: Continuous Compliance Plan)

Pursuant to 326 IAC 6.8-8-1, the Permittee shall implement the maintenance and inspection practices outlined in the current Continuous Compliance Plan (CCP). Pursuant to 326 IAC 6.8-8-2 through 326 IAC 6.8-8-6, 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. The source is subject to 326 IAC 6.8-8. Therefore the following condition is being included in Section C.

C.11 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8)]

(a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)

The source is subject to the requirements of 326 IAC 6.8-10-1 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 6.8-10-1 (Lake County: Fugitive Particulate Matter), 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 in-plant transportation of material by truck or rail at any time.

(g) 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%).

(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) PM_{10} 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 6.8-10-1 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 6.8-11 (Lake County Particulate Matter Contingency Measures)

This source is subject to the requirements of 326 IAC 6.8-11-2, because the source has potential fugitive PM emissions greater than or equal to five (5) tons per year, is located in Lake County, and is specifically listed in 326 IAC 6.8-2.

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 6-3 (Particulate Emission Limitations for Manufacturing Processes)

(a) 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 6-3-2 because they are subject to the requirements of 326 IAC 6.8-2-22.

(b) Facilities 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 not subject to the requirements of 326 IAC 6-3-2 because the source is located in Lake County and subject to 326 IAC 6.8-1.

326 IAC 6.8-1 (Particulate Matter Limitations for Lake County)

Pursuant to 326 IAC 6.8-1-2(a), the particulate matter emissions from EU-18, EU-19, EU-25, and EU-32 shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

326 IAC 6.8-2 (Lake County: PM_{10} Emission Requirements)

Pursuant to 326 IAC 6.8-2-22, the facilities listed in the chart below shall not exceed the respective PM_{10} emission limits:

Facility (as listed in 326 IAC 6.8-2-22)	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
Flue Dust Loadout #1	EU-17	CE-10 AKG 141	0.003	0.110
Flue Dust Loadout #2	EU-16	CE-9 AKG 450	0.003	0.100
Lime Grinder	EU-15 EU-14	CE-6 ALG 400	0.015	0.44
Lime Handling Baghouse #1	EU-6 EU-24	CE-14 ALG 310	0.002	0.260
Lime Handling Baghouse #2	EU-7	CE-15 ALG 300	0.002	0.180
Lime Handling baghouse #4	EU-11 EU-25	CE-25 ALG 600	0.001	0.13
Lime Loadout baghouse #3	EU-8 EU-28	CE-13 ALG 320	0.004	0.410
Lime Loadout Baghouse #1	EU-12	CE-7 ALG 460	0.0004	0.050
Lime Loadout Baghouse #2	EU-13	CE-8 ALG 450	0.0004	0.050

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The five (5) rotary kilns, identified as EU-1 through EU-5, are not subject to the requirements of 326 IAC 7-1.1 because they are subject to 326 IAC 7-4.1-6.

326 IAC 7-4.1 (Lake County Sulfur Dioxide Emission Limitations)

The five (5) rotary kilns, identified as EU-1 through EU-5, are subject to the requirements of 326 IAC 7-4.1 because they are specifically listed in the rule.

(a) Pursuant to 326 IAC 7-4.1 (Lake County Sulfur Dioxide Emission Limitations), the Permittee shall comply with the sulfur dioxide emission limits for the five (5) rotary kilns, identified as EU-1 through EU-5, as follows:

(1) When three (3) or fewer kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) two and ninety-four thousandths (2.094) pounds per ton of lime based on a one hour average; and

(B) forty-eight (48) pounds per hour per operating kiln.

(2) When four (4) kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one hour average; and

(B) forty (40) pounds per hour per operating kiln.

(3) When five (5) kilns are in operation at the same time, the sulfur dioxide emissions are not to exceed:

(A) one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one hour average; and

(B) thirty-four (34) pounds per hour per operating kiln.

(4) The production of lime is not to exceed five hundred fifty (550) tons per day for each rotary kiln.

(5) The SO_2 emissions shall be vented from the kilns/kiln gas filter systems at the following heights above grade:

Kiln Number	Stack Height (feet)
EU-1	79.1
EU-2	85.9
EU-3	86.0
EU-4	94.4
EU-5	87.4

(b) Pursuant to 326 IAC 7-4.1-2 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO_2 limits using one of the following options:

(1) Sampling, Analysis, and Calculations.

(A) Each shipment of limestone and coal is sampled and analyzed by an independent laboratory, utilizing American Society for Testing and Materials (ASTM) standards for sampling and chemical analyzes. The certified analyses that accompany each shipment shall be the source of the data of the sulfur content in both the limestone and coal. Pursuant to 326 IAC 7-4.1-2(c), the current sampling and analysis protocol is as follows:

(i) The coal and limestone sample acquisition points shall be at locations where representative samples of the respective material shipments may be obtained.

(ii) Minimum sample size shall be in accordance with ASTM specifications for representative samples in the size fraction and quantity delivered.

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

(iv) Preparation of the coal sample and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), and (e).

(v) The limestone and coal utilized shall be reconciled monthly by means of the weigh slips and shipping documents.

(B) The Permittee shall calculate the SO_2 scrubbing factor for each kiln as follows:

Scrubbing Factor = [1- ($SO_{2,stack\ test}$/{[%S $_{limestone}$ x Usage $_{limestone}$ / 100 + %S $_{coal}$ x Usage $_{coal}$ / 100] x 2 x 2000})] / 100

where,

%S = weight percent sulfur in either coal or limestone inputs during the most recent stack test
Coal usage = average coal input to kilns during the most recent stack test (tons/hr)
Limestone usage = average limestone input to kilns during the most recent stack test (tons/hr)

The Permittee shall recalculate the scrubbing factor within ninety (90) days after receiving the results of each new kiln performance test for SO_2.

(C) The Permittee shall determine the average SO_2 emissions from each kiln once each calendar month using the following calculation. The sulfur content in the fuel and raw material inputs shall be obtained as specified in (b)(1)(A) above, and the scrubbing factor shall be calculated as specified in (b)(1)(B) above:

SO_2 Emissions (lb/hr) = {[(%S $_{limestone}$ x Daily Usage $_{limestone}$) + (%S $_{coal}$ x Daily Usage $_{coal}$)/100] (1-Scrubbing Factor/100) x 2 x 2000}/ 24

where,

%S = daily average weight percent sulfur in either coal or limestone
Daily Usage Limestone = average daily limestone input to kiln (tons/day)
Daily Usage Coal = average daily coal input to kiln (tons/day)

(2) Pursuant to 326 IAC 7-4.1-2(d), 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. IDEM, OAQ may also require that the Permittee conduct a stack test at any emissions unit within sixty (60) days of written notification by the department.

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 821,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The VOC emissions from each kiln shall not exceed 0.06 pounds per ton of lime produced. Compliance with these limits is equivalent to source-wide VOC emissions of less than twenty-five (25) tons per year and will render the requirements of 326 IAC 8-7 not applicable.

State Rule Applicability - Specifically Regulated Insignificant Activities

326 IAC 8-3 (Organic Solvent Degreaser Operations)

The organic solvent degreasing operation is subject to 326 IAC 8-3-2 because it is a new facility after January 1, 1980, performing organic solvent degreasing operations in the state. The organic

solvent degreasing operation is subject to 326 IAC 8-3-5 because it is located in Lake County and is a new facility after July 1, 1990 and the degreaser does not utilize a remote solvent reservoir. The organic solvent degreasing operation is subject to 326 IAC 8-3-8 because the source is a user of solvents in a cold cleaner degreaser which is located in Lake County.

The degreasing operation shall comply with the following requirements:

(a) Pursuant to 326 IAC 8-3-2, the owner or operator shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the cleaner;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label summarizing the operation requirements; and

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(b) Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one hand if:

(A) The solvent volatility is greater than three-tenths (0.3) pounds per square inch (15 millimeters of mercury) measured at thirty-eight degrees Celsius ($38^{O}C$) (100 degrees Fahrenheit);

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius ($48.9^{O}C$) (one hundred twenty degrees Fahrenheit ($120^{O}F$)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(c) Pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

(d) Pursuant to 326 IAC 8-3-8, users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components, shall ensure that the following operating requirements are met:

(1) On and after November 1, 1999, no person shall do the following:

(A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°C)) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

(B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°C)).

(2) On and after May 1, 2001, no person shall do the following:

(A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty degrees Celsius (20^{0}C) (sixty-eight degrees Fahrenheit (68^{0}C)) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

(B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty degrees Celsius (20^{0}C) (sixty-eight degrees Fahrenheit (68^{0}C)).

(3) On and after November 1, 1999, the following record keeping requirements shall be followed:

(A) All persons subject to (d)(1)(A) and (d)(2)(A) above shall maintain all of the following records for each sale:

(i) The name and address of the solvent purchaser.
(ii) The date of sale.
(iii) The type of solvent.
(iv) The volume of each unit of solvent sold.
(v) The total volume of the solvent.
(vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty degrees Celsius (20^0C) (sixty-eight degrees Fahrenheit (68^0C)).

(B) All persons subject to the requirements of subsection (d)(1)(B) and (d)(2)(B) above shall maintain each of the following records for each purchase:

(i) The name and address of the solvent supplier.
(ii) The date of purchase.
(iii) The type of solvent.
(iv) The volume of each unit of solvent.
(v) The total volume of the solvent.
(vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty degrees Celsius (20^0C) (sixty-eight degrees Fahrenheit (68^0C)).

(4) All records required by subsection (3) above shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

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 ten thousand (10,000) gallons.

State Rule Applicability - Emergency Diesel Generators

326 IAC 6-2 (Particulate Emission from Indirect Heating Units)
The five (5) emergency diesel generators (EG-1 through EG-5) are not subject to 326 IAC 6-2 because they are not a source of indirect heating.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The requirements of 326 IAC 6-3 are not applicable to the five (5) emergency diesel generators (EG-1 through EG-5) because they are not considered a manufacturing process.

326 IAC 6.8-2 (Particulate Matter Limitations for Lake County)
The five (5) emergency diesel generators (EG-1 through EG-5) are not subject to the requirements 326 IAC 6.8-2(a) because the five (5) emergency diesel generators (EG-1 through EG-5) are outside and not enclosed in a building.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The five (5) emergency diesel generators (EG-1 through EG-5) are not subject to the requirements of 326 IAC 7-1.1 because the potential to emit of SO_2 is less than twenty-five (25) tons per year.

326 IAC 7-4.1 (Lake County Sulfur Dioxide Emission Limitations)

The five (5) emergency diesel generators (EG-1 through EG-5) are not subject to the requirements of 326 IAC 7-4.1 because they are not subject to 326 IAC 7-1.1.

326 IAC 8 (Volatile Organic Compounds)

The requirements of 326 IAC 8-1-6 are not applicable to the five (5) emergency diesel generators (EG-1 through EG-5) because none of the emission units have the potential to emit volatile organic compounds in excess of twenty-five (25) tons per year.

Testing Requirements

On July 15, 2008, the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$) was effective. Pursuant to this rule revision, IDEM will continue to evaluate condensable PM for NSR permits and set limits for filterable and condensable PM_{10}/$PM_{2.5}$. However, IDEM will not require compliance demonstration until after the publication of a new or revised condensable test method (consistent with the "transition period" established by the U. S. EPA in this rulemaking). Testing shall be conducted within 180 days of publication of the new or revised condensable PM test methods referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$) signed on May 8, 2008.

The testing requirements applicable to this source are as follows:

1. In order to demonstrate compliance with 326 IAC 7-4.1 and the hourly 326 IAC 6.8-2-22 limits, the following emission testing is required for kilns EU-1 through EU-5:

   (a) No later than thirty (30) months following the last valid compliance demonstration, the Permittee shall perform PM_{10} and SO_2 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 6.8-2-22 and 326 IAC 7-4.1-6. These tests shall be repeated at least once every thirty (30) months from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

   (b) No later than thirty (30) months following the last valid compliance demonstration, the Permittee shall perform PM_{10} and SO_2 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 6.8-2-22 and 326 IAC 7-4.1-6 and shall be repeated at least once every thirty (30) months from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

   (c) 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 (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

2. 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), Lime Grinder (EU-15), Lime Storage System (Old Side) (EU-14), Lime Storage System (New Side) (EU-24), Lime Handling System #2 (EU-7), Lime Loadout #2 (EU-8), and the Lime Loadout #1 (EU-11) could potentially exceed the applicable 326 IAC 6.8-2-22 limits. Therefore, the following testing is required:

(a) The Permittee shall perform PM_{10} testing on the Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (New Side)(EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Lime Loadout #1 (EU-11) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6.8-2-22 and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) The Permittee shall perform PM_{10} testing on the Lime Grinder (EU-15), Lime Storage System (Old Side)(EU-14), Lime Handling System #2 (EU-7), and the Lime Loadout #2 (EU-8) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6.8-2-22 and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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 five (5) rotary kilns, identified as EU-1 through EU-5, have applicable compliance monitoring conditions as specified below:

(a) Opacity Monitoring/Visible Emissions Notations

(1) Pursuant to 326 IAC 6.8-8-5(1), 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).

(A) 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 day during normal daylight operations. Readings shall be taken for a minimum of thirty (30) minutes during each day.

(B) If opacity readings are greater than seventy-five percent (75%) of the applicable standard, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in

accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) 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 emissionnotations of the exhaust from stacks S-1 through S-5 once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(A) 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.

(B) 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.

(C) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C-Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Daily Monitoring of Baghouse Operational Parameters

(1) The Permittee shall record the pressure drop across the baghouse used in conjunction with facilities EU-1 through EU-5, at least once per day when the furnaces 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 latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(3) The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(c) Broken or Failed Bag Detection

(1) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).

(2) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the current batch. 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).

(3) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for 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.

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.

2. Facilities EU-7, EU-8, EU-11, EU-12, EU-13, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, and EU-32 have applicable compliance monitoring conditions as specified below:

(a) Visible Emissions Notations

(1) Visible emission notations of the facilities EU-7, EU-8, EU-11, EU-12, EU-13, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, and EU-32 stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(2) 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.

(3) 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.

(4) 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.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(6) The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) Daily Monitoring of Baghouse Operational Parameters

(1) The Permittee shall record the pressure drop across the baghouse used in conjunction with facilities 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 day when the furnaces 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 latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(3) The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(c) Daily Monitoring of Wet Scrubber Operational Parameters

(1) The Permittee shall record the pressure drop and flow rate of the wet scrubbers, identified as CE-19 and CE-20, controlling emissions from the Pugmills, identified as EU-18 and EU-19, at least once per day when the furnaces are in operation. When for any one reading, the pressure drop across the wet scrubber is outside the normal range of 1.5 and 6.5 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months

(3) The Permittee shall include in its daily record when a pressure drop and flow rate reading is not taken and the reason for the lack of pressure drop and flow rate reading (e.g. the process did not operate that day).

(d) Broken or Failed Bag Detection

(1) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).

(2) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the current batch. 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).

(3) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for 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.

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.

(e) Scrubber Malfunction Detection
In the event that a scrubber malfunction has been observed, failed units and the associated process will be shut down immediately until the failed unit has 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).

(f) The Permittee shall perform the baghouse inspections pursuant to the CCP and 326 IAC 6.8-8-7. The inspections shall be performed at least once per calendar quarter.

These monitoring conditions are necessary because the baghouses and wet scrubbers must operate properly to ensure compliance with 326 IAC 6.8-8 and 326 IAC 6.5-1-2, and render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal 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 application for the purposes of this review was received on September 29, 2008. Additional information was received on March 17, 2009, April 1, 2009, June 4, 2009, and July 7, 2009.

Conclusion

The operation of this stationary lime manufacturing plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No.T089-27040-00112.

Appendix A: Emissions Calculations
PM Emissions from Lime Processing Units

Company Name: Carmeuse Lime Company
Address City IN Zip: 1 North Carmeuse Drive, Gary, Indiana 46406
Permit Number: T089-27040-00112
Reviewer: Donald McQuigg
Date: February 6, 2009

Facility	ID	Capacity (ton/hr)	Grain Loading (gr/dscf)	Exhaust Flow Rate (dscfm)	Controlled PM/PM10 PTE (lb/hr)	(lb/ton)	(ton/yr)	Uncontrolled PM/PM10 PTE (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)

Appendix A: Emissions Calculations
Emissions from Coal-Fired Lime Kilns

Company Name: Carmeuse Lime Company
Address City IN Zip: 1 North Carmeuse Drive, Gary, Indiana 46406
Permit Number: T089-27040-00112
Reviewer: Donald McQuigg
Date: February 6, 2009

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	0.0000

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.

(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
Natural Gas Combustion: Five (5) Space Heaters
MM BTU/HR <100

Company Name: Carmeuse Lime Company
Address City IN Zip: 1 North Carmeuse Drive, Gary, Indiana 46406
Permit Number: T089-27040-00112
Reviewer: Donald McQuigg
Date: February 6, 2009

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.6	5.3

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	28.5	100 **see below	5.5	84
Potential Emission in tons/yr	0.0	0.0	0.1	0.3	0.0	0.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Carmeuse Lime Company
Address City IN Zip: One North Carmeuse Drive, Gary, Indiana 46406
Permit Number: T089-27040-00112
Reviewer: Donald McQuigg
Date: February 6, 2009

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.519E-06	3.154E-06	1.971E-04	4.730E-03	8.935E-06

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.314E-06	2.891E-06	3.679E-06	9.986E-07	5.519E-06

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Internal Combustion Engines: Emergency Diesel Generators
(<600 HP)

Company Name: Carmeuse Lime Company
Address City IN Zip: 1 North Carmeuse Drive, Gary, Indiana 46406
Permit Number: T089-27040-00112
Reviewer: Donald McQuigg
Date: February 6, 2009

Emissions calculated based on output rating (hp)

Heat Input Capacity Horsepower (hp)	Potential Throughput hp-hr/yr
402.5	201250.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.22	0.22	0.21	3.12	0.25	0.67

Methodology
hp = 1.341*kw
Potential Throughput (hp-hr/yr) = hp * 500 hr/yr

Use a conversion factor of 7,000 Btu per hp-hr to convert from horsepower to Btu/hr, unless the source gives you a source-specific brake-specific fuel consumption. (AP-42, Footnote a, Table 3.3-1)

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2
Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)
Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.