



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: February 4, 2013

RE: Lehigh Cement Co. / 093 - 32611 - 00002

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

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
FNPER-AM.dot12/3/07



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Mr. Scott Quass
Lehigh Cement Company, LLC
180 N. Meridian Rd.
Mitchell, IN 47446

February 4, 2013

Re: 093-32611-00002
Administrative Amendment to
Part 70 Renewal No.: T093-24556-00002

Dear Mr. Quass:

Lehigh Cement Company, LLC was issued a Part 70 Operating Permit Renewal on March 7, 2012 for a Portland cement manufacturing plant. A letter requesting changes to this permit was received on December 10, 2012. The source requested that the permit be updated to allow the use of additional alternative fuels in kiln #3 (EU17). This amendment will allow for all three kiln systems to utilize the same blend of alternative fuels - pressed paper-making waste, clean and/or treated wood, and engineered fuel. The Alternate Fuel Delivery System will be modified to allow the use of alternative fuels.

Pursuant to 326 IAC 2-7-11(a)(7), this change to the permit qualifies as an administrative permit amendment, since it is a revision that revises descriptive information that does not trigger a new applicable requirement or violate permit term. It also is a modification to existing emission units that results in an increase of emissions that does not otherwise constitute a modification for purposes of 326 IAC 2-7-10.5 or 326 IAC 2-7-12.

Pursuant to the provisions of 326 IAC 2-7-11 an administrative amendment to this permit is hereby approved as described in the attached Technical Support Document. All other conditions of the permit shall remain unchanged and in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Heath Hartley, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Heath Hartley or extension (2-8217), or dial (317) 232-8217.

Sincerely,

Nathan Bell, Section Chief
Permits Branch
Office of Air Quality

Attachments:

Updated Permit
Technical Support Document
PTE Calculations

hh

cc: File – Lawrence County
Lawrence County Health Department
U.S. EPA, Region V

IDEM Southeast Regional Office
Compliance and Enforcement Branch

Mr. Bert Massengale
Lehigh Cement Company, LLC
180 N. Meridian Rd.
Mitchell, IN 47446

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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Lehigh Cement Company LLC
180 North Meridian Road
Mitchell, Indiana 47446**

(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.: T093-24556-00002	
Issued by: Chrystal Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 7, 2012 Expiration Date: March 7, 2017

Administrative Amendment No.: 093-32611-00002	
Issued by:  Nathan Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 4, 2013 Expiration Date: March 7, 2017

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Attachments

- Attachment A 40 CFR Part 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011)
- Attachment B 40 CFR Part 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006)

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 and the facility/emissions unit description boxes in Sections D of the permit, 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(14)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	180 North Meridian Road, Mitchell, Indiana 47446
Phone Number:	(812) 849-2191
SIC Code:	3241
County Location:	Lawrence
Source Location Status:	Attainment or unclassified for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules Major Source, Section 112 of the Clean Air Act One of the 28 listed source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

(a) The quarry activities, as follows:

(1) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

(b) The quarry material sizing facilities/emissions units, as follows:

(1) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.

(2) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.

(3) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.

(4) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.

- (5) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.
 - (6) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
 - (7) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
 - (8) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
 - (9) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control particulate emissions, and exhausting directly to the atmosphere.
- (c) The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:
- (1) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
 - (2) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
 - (3) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
 - (4) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with particulate emissions uncontrolled, and exhausting directly to the atmosphere.
 - (5) CKD disposal and mining facilities, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) The raw material handling and storage facilities/emissions units, as follows:
- (1) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with particulate

emissions controlled by one (1) baghouse, identified as RMDC1, and exhausting to one (1) stack, identified as S-RMDC1.

- (2) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
 - (3) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
 - (4) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.
 - (5) One (1) coal pile, identified as F04, storage commencing prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
 - (6) Raw material stockpiles, collectively identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag with particulate matter emissions uncontrolled, and exhausting to the atmosphere.
- (e) One (1) Kiln alternative fuel delivery system, identified as F19, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 262,800 tons per year.

Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with these facilities are considered affected sources.

- (f) The raw mill facilities/emissions units, as follows:
- (1) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour, and including a natural gas direct-fired burner approved in 1999 for construction, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
 - (2) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour, and including a natural gas direct-fired burner approved in 1999 for construction, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

Under 40 CFR 63, Subpart LLL, these are considered affected sources.

- (g) The raw mill storage facilities/emissions units, as follows:
- (1) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with particulate emissions controlled by two (2)

baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.

- (2) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (3) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (4) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (5) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

Under 40 CFR 63, Subpart LLL, these are considered affected sources.

(h) The clinker handling facilities/emissions units, as follows:

- (1) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (2) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (3) One (1) North storage drag, identified as EU26b, constructed in 1959, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (4) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (5) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.

- (6) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (7) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (8) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (9) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7. Under 40 CFR 63, Subpart LLL, this is considered an affected source.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the north clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

- (i) The finish mill facilities/emissions units, as follows:
 - (1) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
 - (2) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
 - (3) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
 - (4) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
 - (5) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.

- (6) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

Under 40 CFR 63, Subpart LLL, the finish mill facilities/emissions units are considered affected sources.

(j) The finish material storage facilities/emissions units, as follows:

- (1) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
- (2) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
- (3) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively. Under 40 CFR 63, Subpart LLL, this is considered an affected source.

(k) The bulk loading and packaging facilities/emissions units, as follows:

- (1) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (2) One (1) east truck vaculoader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (3) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (4) One (1) west truck vaculoader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (5) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (6) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.

- (7) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (8) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

Under 40 CFR 63, Subpart LLL, the bulk loading and packaging facilities/emissions units are considered affected sources.

(I) The kiln facilities/emissions units, as follows:

- (1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and dioxins/furans controlled and SO₂ partially controlled by a Water Spray Tower, and exhausting to one (1) stack, identified as S-KP1.

Kiln #1 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #1 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #1 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input as set forth in RR 093-30083-00002 (issued March 7, 2011).

- (2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and dioxins/ furans controlled and SO₂ partially controlled by a Water Spray Tower, and exhausting to one (1) stack, identified as S-KP1.

Kiln #2 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #2 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #2 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input as set forth in RR 093-30083-00002 (issued March 7, 2011).

- (3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with particulate emissions controlled by one (1)

electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2.

Kiln #3 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #3 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #3 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input.

Under 40 CFR 63, Subpart LLL, kiln #1, kiln #2, and kiln #3 are considered affected sources.

(m) The clinker cooler facilities/emissions units, as follows:

- (1) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (2) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (3) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

Under 40 CFR 63, Subpart LLL, clinker cooler #1, clinker cooler #2, and clinker cooler #3 are considered affected sources.

(n) Calcium sulfate material facilities/emission units, consisting of the following:

- (1) Two (2) storage piles, identified as F10 and F12, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.
- (2) One (1) synthetic gypsum hopper, identified as F11, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
- (3) One (1) synthetic gypsum weight belt, identified as F15, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (4) One (1) raw material hopper, identified as F13, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum

throughput: 60 tons per hour. Under 40 CFR 63, Subpart LLL, this is considered an affected source.

- (5) One (1) raw material weight belt, identified as F16, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (6) One (1) main belt #1, identified as F17, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (7) One (1) enclosed CKD conveyor #1, identified as EU50, approved for construction in 2004, maximum throughput: 50 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (8) One (1) CKD storage silo, identified as EU48, constructed in 1961, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as RMDC5, and exhausting to stack S-RMDC5, maximum throughput: 50 tons per hour. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
- (9) One (1) enclosed CKD conveyor #2, identified as EU51, approved for construction in 2004, maximum throughput: 50 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (10) One (1) enclosed pugmill, identified as EU49, approved for construction in 2004, maximum capacity: 100 tons per hour. Under 40 CFR 63, Subpart LLL, this is considered an affected source.
- (11) One (1) main belt #2, identified as F18, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour. Under 40 CFR 63, Subpart LLL, the conveyor transfer points associated with this facility are considered affected sources.
- (12) One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, approved for construction in 2004, potential capacity: 0.10 acre.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-5(14)]

This stationary source includes the following specifically regulated insignificant activities:

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

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); and
- (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, T093-24556-00002, 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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent 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(35).

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 July 1 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 and Condition B.10 - Preventive Maintenance Plan for that unit. The Operation and Maintenance Plan required under 40 CFR 63, Subpart LLL has been deemed to satisfy the PMP requirements of 326 IAC 1-6-3 and Condition B.10 - Preventive Maintenance Plan for the affected sources.

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, or Southeast 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: (317) 233-0178 (ask for Compliance and Enforcement Branch); Facsimile Number: (317) 233-6865
Southeast Regional Office Telephone Number: (812) 358-2027;
Facsimile Number: (812) 358-2058

- (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

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, Indiana 47220-9557

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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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)(8) 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.

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) The IDEM, OAQ has made the following nonapplicability determinations regarding this source:

- (1) None of the facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.60 (Subpart F) because they are not affected facilities, they pre-date the applicability date, and/or they are specifically exempted facilities that are subject to the requirements of the NESHAP, 40 CFR 63.1340 (Subpart LLL).
- (2) None of the coal processing facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.250 (Subpart Y) because they pre-date the applicability date.
- (3) The quarry activities (drilling/blasting, hauling, handling, and storage) listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they are not affected facilities.
- (4) The raw material handling and storage facilities/emission units EU09 (conveying system to raw material to storage) and EU10 (shale crusher) listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior to the applicability date of August 31, 1983.
- (5) None of the other facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they are not affected facilities and/or they are specifically exempted facilities that are subject to the requirements of the NESHAP, 40 CFR 63.1340 (Subpart LLL).
- (6) None of the facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.
- (7) The parts washer listed in this permit is not subject to the requirements of the NESHAP 326 IAC 20-6, 40 CFR 63.460 (Subpart T) because it does not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.
- (8) None of the quarry activities, the quarry material sizing facilities/emissions units, and the cement kiln dust storage, disposal, mining, and handling facilities/emissions units listed in this permit are subject to the requirements of the NESHAP 40 CFR 63.1340 (Subpart LLL) because they are not considered affected sources.
- (9) The raw material handling and storage facilities/emissions units EU09 (conveying system to transport raw material to storage), EU10 (shale crusher), F08 (coal unloading building), F04 (coal pile), and F09 (Raw material stockpiles) are not subject to the requirements of the NESHAP 40 CFR 63.1340 (Subpart LLL) because they are not considered affected sources.
- (10) The clinker handling units EU26c (scrap bin clinker ladder), EU28 (hot spout clinker ladder), and EU30 (east clinker ladder) are not subject to the requirements of the NESHAP 40 CFR 63.1340 (Subpart LLL) because they are not emission units; they are flaps used to reduce drop heights from the north clinker tower, the south clinker tower, and the north storage drag.
- (11) The calcium sulfate material facilities/emissions units F10 and F12 (two (2) storage piles), and F14 (outdoor, partially enclosed calcium sulfate material

storage pile) are not subject to the requirements of the NESHAP 40 CFR 63.1340 (Subpart LLL) because they are not considered affected sources.

- (c) 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.
- (d) 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.
- (e) 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.
- (f) 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).
- (g) 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)]
- (h) 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 T093-24556-00002 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (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.16 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(41). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
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 does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20 (b) or (c) 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) or (c). 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) and (c)(1).

- (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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

B.21 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

Indiana Department of Environmental Management
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 does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ 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.24 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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 forty percent (40%) 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.3 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.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 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.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 61-53 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 that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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) For performance testing required by this permit, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) 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)][40 CFR 64][326 IAC 3-8]

- (a) Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 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.12 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.13 Risk Management Plan [326 IAC 2-7-5(11)] [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.14 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

- (1) The Permittee shall take reasonable response steps to 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 excess emissions.
 - (2) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (A) initial inspection and evaluation;
 - (B) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (C) any necessary follow-up actions to return operation to normal or usual manner of operation.
 - (3) 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:
 - (A) monitoring results;
 - (B) review of operation and maintenance procedures and records; and/or
 - (C) inspection of the control device, associated capture system, and the process.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (5) The Permittee shall record the reasonable response steps taken.
- (b)
- (1) *CAM Response to excursions or exceedances.*
 - (A) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
 - (B) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

- (2) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- (3) Based on the results of a determination made under paragraph (b)(1)(B) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (4) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (5) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (6) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (b)(1)(B) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (A) Failed to address the cause of the control device performance problems; or
 - (B) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (7) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (8) *CAM recordkeeping requirements.*
 - (A) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (b)(1)(B) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
 - (B) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

C.15 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.16 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]
Pursuant to 326 IAC 2-6-3(a)(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.17 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. Support information includes the following:
 - (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the Part 70 permit.Records of required monitoring information include the following:
 - (AA) The date, place, as defined in this permit, and time of sampling or measurements.
 - (BB) The dates analyses were performed.
 - (CC) The company or entity that performed the analyses.
 - (DD) The analytical techniques or methods used.
 - (EE) The results of such analyses.
 - (FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1(kk)(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 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [40 CFR 64][326 IAC 3-8]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

- (b) The address for report submittal is:

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) 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.

- (e) 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(oo) and/or 326 IAC 2-3-1(jj)) 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(ww) and/or 326 IAC 2-3-1(pp), 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).
- (f) The report for project at an existing emissions unit shall be submitted no later than 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 wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

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

- (g) 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.19 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 applicable standards for recycling and emissions reduction.

SECTION D.1 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (a) The quarry activities, as follows:
 - (1) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

- (b) The quarry material sizing facilities/emissions units, as follows:
 - (1) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
 - (2) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
 - (3) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
 - (4) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
 - (5) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.
 - (6) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
 - (7) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
 - (8) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
 - (9) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control particulate emissions, and exhausting directly to the atmosphere.

(continued on next page)

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- (c) The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:
- (1) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
 - (2) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
 - (3) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
 - (4) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with particulate emissions uncontrolled, and exhausting directly to the atmosphere.
 - (5) CKD disposal, and mining facilities/emission units, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

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

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

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

- (a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and T093-5990-00002, issued on December 30, 2002, the following conditions shall apply:
- (1) The combined PM emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 5.68 pounds per hour.
 - (2) The combined PM₁₀ emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 3.40 pounds per hour.
- (b) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), the following conditions shall apply:
- (1) The Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) shall each be limited to 2,500 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (2) PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

Condition	Unit ID	Unit Description	Baghouse ID	Emission Limit	
				PM (lbs/hr)	PM ₁₀ (lbs/hr)
D.1.1(b)(1)	EU05	north screen house	QDC5	0.18	0.18
D.1.1(b)(2)	EU07	belt #7 to belt #8 conveyor transfer point	QDC7	0.44	0.44
D.1.1(b)(3)	EU08	belt #8 to belt #9 conveyor transfer point	QDC8	0.44	0.44
D.1.1(b)(4)	EU24	cement kiln dust bin	KDC7	0.89	0.89
D.1.1(b)(5)	EU24A	CKD Truck Unloading System	KDC7A	0.36	0.36
D.1.1(b)(6)	EU24B	mixer	KDC7B	0.54	0.54

- (c) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), and as revised by Significant Source Modification 093-19158-00002 (issued November 5, 2004), the PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

Condition	Unit ID	Unit Description	Baghouse ID	Emission Limit	
				PM (lbs/hr)	PM ₁₀ (lbs/hr)
D.1.1(c)(1)	EU01	primary crusher	QDC2	0.68	0.68
D.1.1(c)(2)	EU02	quarry surge bin and transfer system	QDC3	0.50	0.50
D.1.1(c)(3)	EU03 & EU04	secondary crusher tertiary crusher (combined)	QDC4	0.72	0.72
D.1.1(c)(4)	EU06	south screen house	QDC6	0.79	0.79

Compliance with these limits, in conjunction with limits in D.2.1, D.3.1, D.4.1, D.5.1, and D.6.1, shall limit the PM and PM₁₀ emissions increase from each of the above-referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to these modifications.

D.1.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the quarry material sizing facilities/emissions units (EU01 through EU08 and F02) shall not exceed 77.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 975 tons per hour.
- (b) Pursuant to minor source modification 093-11313 issued November 9, 1999 for the CKD mixer (EU24B) and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) for all units, the allowable PM emission rate from the cement kiln dust (CKD) storage, disposal, mining, and handling facilities/emissions units (EU24, EU24A, and EU24B) shall not exceed 51.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pound per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11 - 40} \quad \text{where: } E = \text{rate of emission in pounds per hour}$$

P = process weight rate in tons per hour

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pounds per hour limitation calculated using the above referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order for all units to comply with Conditions D.1.1 and D.1.2, each baghouse listed in this section for particulate control shall be in operation and control emissions at all times when its associated facility/emissions unit is 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 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.

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

D.1.5 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: primary crusher (EU01), surge bin and transfer system (EU02), secondary crusher (EU03), tertiary crusher (EU04), north screen house (EU05), south screen house (EU06), belt #7 to belt #8 conveyor transfer point (EU07), belt #8 to belt #9 conveyor transfer point (EU08), cement kiln dust (CKD) bin (EU24), CKD truck unloading system (EU24A), and CKD mixer (EU24B).

- (a) Visible emission notations of all baghouse stack exhausts listed in this section 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.

In lieu of a trained employee, the Permittee may utilize an independent contractor who has been trained in the appearance and characteristics of normal visible emissions for the specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: primary crusher (EU01), surge bin and transfer system (EU02), secondary crusher (EU03), tertiary crusher (EU04), north screen house (EU05), south screen house (EU06), belt #7 to belt #8 conveyor transfer point (EU07), belt #8 to belt #9 conveyor transfer point (EU08), cement kiln dust (CKD) bin (EU24), CKD truck unloading system (EU24A), and CKD mixer (EU24B).

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per month when the associated facility/emissions unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.7 Broken or Failed Bag Detection

- (a) 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).
- (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 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(b) - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) operating hours.
- (b) To document the compliance status with Condition D.1.5 - Visible Emissions Notations and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of visible emission notations required by that condition. Alternatively, the Permittee may

include in its daily record the reason for the lack of a visible emission notations (e.g. the process did not operate during daylight hours that day).

- (c) To document the compliance status with Condition D.1.6 - Parametric Monitoring and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of the pressure drop readings required by that condition. Alternatively, the Permittee may include in its monthly record the reason for the lack of pressure drop reading (e.g. the process did not operate that month).
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.1.9 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1(b) - Prevention of Significant Deterioration (PSD) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligation with regards to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.2 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (d) The raw material handling and storage facilities/emissions units, as follows:
- (1) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC1 and exhausting to one (1) stack, identified as S-RMDC1.
 - (2) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
 - (3) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.
 - (4) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.
 - (5) One (1) coal pile, identified as F04, constructed prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
 - (6) Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag with particulate matter emissions uncontrolled, and exhausting to the atmosphere.
- (e) One (1) Kiln alternative fuel delivery system, identified as F19, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 262,800 tons per year.
- (f) The raw mill facilities/emissions units, as follows:
- (1) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour, and including a natural gas direct-fired burner approved in 1999 for construction, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
 - (2) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour, and including a natural gas direct-fired burner approved in 1999 for construction, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

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

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

D.2.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

- (a) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), the following conditions shall apply:
- (1) The Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) shall each be limited to 2,500 hours of operation per

twelve (12) consecutive month period with compliance determined at the end of each month.

- (2) PM and PM10 emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.
 - (3) PM and PM10 emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.
 - (4) PM and PM10 emissions from baghouse RMDC4 controlling Raw Mill #2 (EU12) shall each not exceed 4.51 pounds per hour.
- (b) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), and as revised by Significant Source Modification 093-19158-00002 (issued November 5, 2004), the following conditions shall apply:
- (1) PM and PM10 emissions from baghouse RMDC3 controlling Raw Mill #1 (EU11) shall each not exceed 3.50 pounds per hour.

Compliance with these limits, in conjunction with limits in D.1.1, D.3.1, D.4.1, D.5.1, and D.6.1, shall limit the PM and PM₁₀ emissions increase from each of the above-referenced modifications, to less than twenty-five (25) and fifteen (15) tons per year, respectively, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to these modifications.

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the following operations shall not exceed the listed particulate emission rate (pounds per hour) (total for all facilities/emission units combined within each operation) when operating at the listed process weight rate.

Condition	Unit ID	Unit Description	Process Weight Rate (tons/hr)	Particulate Emission Rate (lbs/hr)
D.2.2(a)	EU09	raw material conveying system	200	58.5
D.2.2(b)	EU10	shale crusher	200	58.5
D.2.2(c)	EU11	raw mill #1	100	51.3
D.2.2(d)	EU12	raw mill #2	100	51.3
D.2.2(e)	F19	Alternate Fuel Delivery System	30	40.0

The pounds per hour limitations were calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.1 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners associated with Raw Mill EU11 and Raw Mill EU12 shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply to Raw Mill EU11 and Raw Mill EU12.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.2.1(a)(4) and (b)(1), the Permittee shall perform PM and PM₁₀ testing on the Raw Mill EU11 and Raw Mill EU12 utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.6 Particulate Control

- (a) In order to comply with Condition D.2.1 and D.2.2, each baghouse listed in this section for particulate control shall be in operation and control emissions at all times when its associated facility/emissions unit is 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 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.

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

D.2.7 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: conveying system to transport raw material to storage (EU09), shale crusher (EU10), raw mill #1 (EU11), and raw mill #2 (EU12).

- (a) Visible emission notations of all baghouse stack exhausts listed in this section 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.

In lieu of a trained employee, the Permittee may utilize an independent contractor who has been trained in the appearance and characteristics of normal visible emissions for the specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.8 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: conveying system to transport raw material to storage (EU09), shale crusher (EU10), raw mill #1 (EU11), and raw mill #2 (EU12).

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per month when the associated facility/ emissions unit is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.2.9 Broken or Failed Bag Detection

- (a) 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).
- (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 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.1(a) - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) operating hours.

- (b) To document the compliance status with Condition D.2.7 - Visual Emissions Notations and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of visible emission notations required by that condition. Alternatively, the Permittee may include in its daily record the reason for the lack of a visible emission notations (e.g. the process did not operate during daylight hours that day).
- (c) To document the compliance status with Condition D.2.8 - Parametric Monitoring and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of the pressure drop readings required by that condition. Alternatively, the Permittee may include in its monthly record the reason for the lack of pressure drop reading (e.g. the process did not operate that month).
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.2.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.2.1(a) - Prevention of Significant Deterioration (PSD) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.3 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (g) The raw mill storage facilities/emissions units, as follows:
- (1) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
 - (2) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
 - (3) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
 - (4) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
 - (5) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.
- (h) The clinker handling facilities/emissions units, as follows:
- (1) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
 - (2) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
 - (3) One (1) North storage drag, identified as EU26b, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, constructed in 1959, and exhausting to one (1) stack, identified as S-FDC2.
 - (4) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
 - (5) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.
 - (6) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
 - (7) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.

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- (8) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (9) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the North clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

(i) The finish mill facilities/emissions units, as follows:

- (1) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (2) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (3) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
- (4) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (5) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.
- (6) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

(j) The finish material storage facilities/emissions units, as follows:

- (1) One (1) surge bin, identified as EU37, with a nominal rate of 35 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (2) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.
- (3) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively.

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(k) The bulk loading and packaging facilities/emissions units, as follows:

- (1) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (2) One (1) east truck vaculoader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (3) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (4) One (1) west truck vaculoader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (5) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (6) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.
- (7) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (8) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with particulate emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

(n) Calcium sulfate material facilities/emission units, consisting of the following:

- (8) One (1) CKD storage silo, identified as EU48, constructed in 1961, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as RMDC5, and exhausting to stack S-RMDC5, maximum throughput: 50 tons per hour.

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

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

- (a) Pursuant to the 1987 Roll Crusher Modification, 1989 Finish Mill #4 Separator Modification, 1993 Lime Bin Modification, and as revised by Significant Source Modification 093-15822-00002 (issued June 24, 2003), the following conditions shall apply:
 - (1) The Finish Mill Surge Bin (EU37) shall be limited to 1,500 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (2) The Lime Bin (EU38) shall be limited 2,500 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.

- (3) The Railroad Loadout Bin (EU45) and the Articulator (EU46) shall be limited to 2,000 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.
- (4) The Packing Machine (EU47) shall be limited to 5,500 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.
- (5) The PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

Condition	Unit ID	Unit Description	Baghouse ID	Emission Limit	
				PM (lbs/hr)	PM ₁₀ (lbs/hr)
D.3.1(a)(5)(A)	EU13 EU48	blending bins and CKD silo	RMDC5	1.06	1.06
D.3.1(a)(5)(B)	EU13	blending bins	RMDC6	0.53	0.53
D.3.1(a)(5)(C)	EU14	kiln supply silos	RMDC7	1.06	1.06
			RMDC8	0.53	0.53
D.3.1(a)(5)(D)	EU25	south storage drag	FDC1	0.47	0.47
D.3.1(a)(5)(E)	EU26a	north clinker tower	FDC2	1.76	1.76
D.3.1(a)(5)(F)	EU27	south clinker tower	FDC3	1.68	1.68
D.3.1(a)(5)(G)	EU28	hot spout clinker ladder	FDC4	1.76	1.76
D.3.1(a)(5)(H)	EU30	east clinker ladder	FDC6	1.21	1.21
D.3.1(a)(5)(I)	EU31	roll crusher	FDC7	1.84	1.84
D.3.1(a)(5)(J)	EU32	finish mill #1 and associated feed bin	FDC8	1.42	1.42
D.3.1(a)(5)(K)	EU33	finish mill #2 and associated feed bin	FDC9	1.42	1.42
D.3.1(a)(5)(L)	EU34	finish mill #3 and associated feed bin	FDC10	1.42	1.42
D.3.1(a)(5)(M)	EU35	finish mill #4 and associated feed bin	FDC11	0.64	0.64
D.3.1(a)(5)(N)	EU36	finish mill #4 separator	FDC12	3.27	3.27
D.3.1(a)(5)(O)	EU37	surge bin	FDC13	0.49	0.49
D.3.1(a)(5)(P)	EU38	lime bin	FDC14	0.22	0.22
D.3.1(a)(5)(Q)	EU39A	north silo operation	SDC1	1.77	1.77
D.3.1(a)(5)(R)	EU39B	south silo operation	SDC2	1.77	1.77
D.3.1(a)(5)(S)	EU40A	silo transfer system	SDC3	0.57	0.57
D.3.1(a)(5)(T)	EU40B	silo transfer system	SDC4	0.57	0.57
D.3.1(a)(5)(U)	EU41	east truck loadout bin	SDC5	0.43	0.43
D.3.1(a)(5)(V)	EU42	east truck vacuolader	SDC6	0.22	0.22
D.3.1(a)(5)(W)	EU43	west truck loadout bin	SDC7	0.43	0.43
D.3.1(a)(5)(X)	EU44	west truck vacuolader	SDC8	0.22	0.22
D.3.1(a)(5)(Y)	EU45	railroad loadout bin	SDC9	0.71	0.71
D.3.1(a)(5)(Z)	EU46	articulator	SDC10	0.21	0.21

- (b) Pursuant to the 1979 Pan Clinker Conveyor Modification, 1984 Packing Machine Modification, and Significant Source Modification 093-15822-00002 (issued June 24,

2003), and as revised by Significant Source Modification 093-19158-00002 (issued November 5, 2004), the PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

Condition	Unit ID	Unit Description	Baghouse ID	Emission Limit	
				PM (lbs/hr)	PM ₁₀ (lbs/hr)
D.3.1(b)(1)	EU18	kiln #1 feed bin	KDC1	0.49	0.49
D.3.1(b)(2)	EU20	kiln #2 feed bin	KDC3	0.49	0.49
D.3.1(b)(3)	EU29	pan clinker conveyor	FDC5	0.85	0.85
D.3.1(b)(4)	EU47	packing machine	SDC11	0.92	0.92
			SDC12	0.92	0.92

Compliance with these limits, in conjunction with limits in D.1.1, D.2.1, D.4.1, D.5.1, and D.6.1, shall limit the PM and PM₁₀ emissions increase from each of the above-referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to these modifications.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the following operations shall not exceed the listed particulate emission rate (pounds per hour) (total for all facilities/emission units combined within each operation) when operating at the listed process weight rate.

Condition	Unit ID	Unit Description	Process Weight Rate (tons/hr)	Particulate Emission Rate (lbs/hr)
D.3.2(a)	EU13 & EU14	raw mill blending and kiln supply storage facilities/emissions units	250	61.0
D.3.2(b)	EU18	kiln feed bin #1	66	47.2
D.3.2(c)	EU20	kiln feed bin #2	66	47.2
D.3.2(d)	EU22	kiln feed bin #3	73	48.2
D.3.2(e)	EU25	south storage drag	120	53.1
D.3.2(f)	EU26a	north clinker tower	120	53.1
D.3.2(g)	EU26b	north storage drag	120	53.1
D.3.2(h)	EU27	south clinker tower	120	53.1
D.3.2(i)	EU29	pan clinker conveyor	120	53.1
D.3.2(j)	EU31	roll crusher	240	60.5
D.3.2(k)	EU32	finish mill #1 and associated feed bin	37	42
D.3.2(l)	EU33	finish mill #2 and associated feed bin	37	42
D.3.2(m)	EU34	finish mill #3 and associated feed bin	37	42
D.3.2(n)	EU35, EU36	finish mill #4, associated feed bin and separator	50	45
D.3.2(o)	EU37	surge bin	35	41.3
D.3.2(p)	EU38	lime bin	6	13.6
D.3.2(q)	EU39A	north silo operation	60	46.3

Condition	Unit ID	Unit Description	Process Weight Rate (tons/hr)	Particulate Emission Rate (lbs/hr)
D.3.2(r)	EU39B	south silo operation	60	46.3
D.3.2(s)	EU40A	silo transfer system	300	63
D.3.2(t)	EU40B	silo transfer system	300	63
D.3.2(u)	EU41, EU42	east truck loadout bin and vacuolader	450	67.7
D.3.2(v)	EU43, EU44	west truck loadout bin and vacuolader	450	67.7
D.3.2(w)	EU45, EU46	railroad loadout bin and articuloader	240	60.5
D.3.2(x)	EU47	packing machine	40	43

The pounds per hour limitation for the lime bin (EU38) was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The pounds per hour limitations for all the other processes were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pound per hour limit calculated using the above-referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.3.1(a)(5)(l)-(M) and D.3.2(k)-(n), the Permittee shall perform PM and PM10 testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), Finish Mill #4 (EU35) and the finish mill #4 separator (EU36) utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.3.5 Particulate Control

- (a) In order to comply with Conditions D.3.1 and D.3.2, each baghouse listed in this section for particulate control shall be in operation and control emissions at all times when its associated facility/emissions unit is 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 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.

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

D.3.6 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: blending bins (EU13), kiln supply silos (EU14), kiln feed bin #1 (EU18), kiln feed bin #2 (EU20), kiln feed bin #3 (EU22), south storage drag (EU25), south clinker tower (EU27), hot spout clinker ladder (EU28), pan clinker conveyor (EU29), east clinker ladder (EU30), roll crusher (EU31), finish mill #1 with associated feed bin (EU32), finish mill #2 with associated feed bin (EU33), finish mill #3 with associated feed bin (EU34), finish mill #4 with associated feed bin (EU35), finish mill #4 separator (EU36), lime bin (EU38), surge bin (EU37), north and south silo operation consisting of thirty (30) storage silos (EU39A and EU39B), silo transfer system (EU40A and EU40B), east truck loadout bin (EU41), east truck vacuolader (EU42), west truck loadout bin (EU43), west truck vacuolader (EU44), railroad loadout bin (EU45), articuloader (EU46), packing machine (EU47), and baghouse (FDC2).

- (a) Visible emission notations of all baghouse stack exhausts listed in this section 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.

In lieu of a trained employee, the Permittee may utilize an independent contractor who has been trained in the appearance and characteristics of normal visible emissions for the specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.7 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: blending bins (EU13), kiln supply silos (EU14),

kiln feed bin #1 (EU18), kiln feed bin #2 (EU20), kiln feed bin #3 (EU22), south storage drag (EU25), south clinker tower (EU27), hot spout clinker ladder (EU28), pan clinker conveyor (EU29), east clinker ladder (EU30), roll crusher (EU31), finish mill #1 with associated feed bin (EU32), finish mill #2 with associated feed bin (EU33), finish mill #3 with associated feed bin (EU34), finish mill #4 with associated feed bin (EU35), finish mill #4 separator (EU36), lime bin (EU38), surge bin (EU37), north and south silo operation consisting of thirty (30) storage silos (EU39A and EU39B), silo transfer system (EU40A and EU40B), east truck loadout bin (EU41), east truck vaculoader (EU42), west truck loadout bin (EU43), west truck vaculoader (EU44), railroad loadout bin (EU45), articuloader (EU46), packing machine (EU47), and baghouse (FDC2).

The Permittee shall record the pressure drop across each baghouse listed in this section at least once per month when the associated facility/emission units are in operation and venting to the atmosphere. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.3.8 Broken or Failed Bag Detection

- (a) 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).
- (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 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.3.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.1(a)(1), (a)(2), (a)(3), and (a)(4) - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the Finish Mill Surge Bin (EU37), the Lime Bin (EU38), the Railroad Loadout Bin (EU45), the Articuloader (EU46) and the Packing Machine (EU47) operating hours.
- (b) To document the compliance status with Condition D.3.6 - Visual Emissions Notations and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of visible emission notations required by that condition. Alternatively, the Permittee may include in its daily record the reason for the lack of a visible emission notations (e.g. the process did not operate during daylight hours that day).

- (c) To document the compliance status with Condition D.3.7 - Parametric Monitoring and Compliance Assurance Monitoring (CAM), the Permittee shall maintain records of the pressure drop readings required by that condition. Alternatively, the Permittee may include in its monthly record the reason for the lack of pressure drop reading (e.g. the process did not operate that month).
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.3.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.3.1(a)(1), (a)(2), (a)(3), and (a)(4) - Prevention of Significant Deterioration (PSD) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.4 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (l) The kiln facilities/emissions units, as follows:
- (1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and dioxins/furans controlled and SO₂ partially controlled by a Water Spray Tower, and exhausting to one (1) stack, identified as S-KP1.
- Kiln #1 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.
- Kiln #1 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.
- Kiln #1 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input as set forth in RR 093-30083-00002 (issued March 7, 2011).
- (2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and dioxins/furans controlled and SO₂ partially controlled by a Water Spray Tower, and exhausting to one (1) stack, identified as S-KP1.
- Kiln #2 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.
- Kiln #2 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.
- Kiln #2 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input as set forth in RR 093-30083-00002 (issued March 7, 2011).
- (3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2.
- Kiln #3 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.
- Kiln #3 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.
- Kiln #3 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input.

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

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

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), the following conditions shall apply:

- (a) The Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16) shall be limited to 321,875 tons each per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) PM emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.28 lb/ton clinker.
- (c) PM10 emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.59 lb/ton clinker.
- (d) NOx emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 11.14 lb/ton clinker.
- (e) CO emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.67 lb/ton clinker.
- (f) SO₂ emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 7.51 lb/ton clinker.
- (g) VOC emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.30 lb/ton clinker.
- (h) Lead emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.69E-03 lb/ton clinker.
- (i) Sulfuric Acid mist emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 3.9E-02 lb/ton clinker.
- (j) H₂S emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.037 lb/ton clinker.

Compliance with these limits, in conjunction with limits in D.1.1, D.2.1, D.3.1, and D.5.1, shall limit the emissions increase from the preheater modification to less than the PSD significant thresholds, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the preheater modification.

D.4.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of coal in each of the kilns shall not exceed six (6.0) pounds per MMBtu heat input each. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a monthly average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.4.3 NOx Emissions [326 IAC 10-3]

Pursuant to 326 IAC 10-3-3, during the ozone control period of each year, the Permittee shall operate Kiln #1 (EU15), Kiln #2 (EU16), and Kiln #3 (EU17) with either mid-kiln firing or low-NO_x burners.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.5 Testing requirement [326 IAC 2-1.1-11]

To verify compliance with condition D.4.1(b)-(j), the Permittee shall perform PM, PM₁₀, NO_x, CO, SO₂, VOC, Sulfuric Acid mist, H₂S and Lead testing on Kiln #1 (EU15) and Kiln #2 (EU16) utilizing methods approved by the Commissioner at least once every 2.5 years from the date of the most recent valid compliance demonstration for each of these pollutants. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.4.6 Particulate Control

In order to comply with Condition D.4.1(b), (c) and (h), the ESPs, identified as KP1 and KP2, shall be in operation and control emissions at all times when its associated kiln is in operation, except if otherwise provided by statute, rule or this permit.

D.4.7 Sulfur Dioxide Control

In order to comply with Condition D.4.1, the water spray towers for kiln #1 (EU15) and kiln #2 (EU16) for partial Sulfur Dioxide control shall be in operation and control emissions at all times when its associated kiln is in operation.

D.4.8 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5] [326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods.

(a) Coal sampling and analysis shall be performed using one of the following procedures:

(1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:

- (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
- (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
- (C) Minimum sample size shall be five hundred (500) grams;
- (D) Samples shall be composited and analyzed at the end of each calendar month;
- (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e);

- (2) Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
- (3) Sample and analyze the coal pursuant to 326 IAC 3-7-3.
- (b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the kilns in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Methods 6, 6A, 6C, or 8.
- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(e)]

D.4.9 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 326 IAC 2-1.1-11, a continuous opacity monitoring system (COM) shall be installed, calibrated, maintained, and operated for measuring the opacity from each of the kilns (EU15, EU16 and EU17), pursuant to 326 IAC 3-5-2. All continuous opacity monitors (COM) shall meet the performance specifications of 326 IAC 3-5-2 and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (b) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

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

D.4.10 Maintenance of Continuous Opacity Monitoring (COM) Equipment [326 IAC 2-7-5(3)(A)(iii)]

Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor opacity from the stack.

- (a) Visible Emission readings shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
- (b) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once twice per day during daylight operations, with at least four (4) hours between each set of readings until a COM is online.
- (c) Method 9 opacity readings may be discontinued once a COMS is online.
- (d) Any opacity exceedances determined by Method 9 opacity readings shall be reported in the Quarterly Opacity Exceedances Reports.

D.4.11 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

- (a) Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), in order to provide reasonable assurance of compliance with Conditions D.4.1(b) and (c), the Permittee shall comply with the EU15 and EU16 PM and PM₁₀ monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland

Cement Manufacturing Industry). Compliance with these monitoring requirements satisfies CAM for PM and PM₁₀ for EU15 and EU16.

- (b) Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), in order to provide reasonable assurance of compliance with Conditions D.4.1(f), the Permittee shall comply with the EU15 and EU16 applicable dioxin/furan monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry). Compliance with these monitoring requirements satisfies CAM for SO₂ for EU15 and EU16.

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

D.4.12 Record Keeping Requirements

- (a) In order to document the compliance status with Conditions D.4.2 - Sulfur Dioxide (SO₂) and D.4.8 - Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.4.2.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual monthly coal usage since last compliance determination period;
 - (3) Calendar month average sulfur content and heat content of coal;
 - (4) Calendar month average sulfur dioxide emission rates in pounds per million Btu of heat input.
- (b) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (c) To document the compliance status with Conditions D.4.5 - Testing Requirements, D.4.9 - Continuous Emissions Monitoring, and D.4.10 - Maintenance of Continuous Opacity Monitoring (COM) Equipment, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with Conditions D.4.5, D.4.9, and D.4.10.
- (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
 - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.
- (d) To document the compliance status with Condition D.4.11 - Compliance Assurance Monitoring (CAM) Plan and the CAM record keeping requirements in 40 CFR 64.9, the Permittee shall maintain the following records for Preheater Kilns #1 and #2, on site:
- (1) Monitoring data.
 - (2) Monitor Performance Data.
 - (3) Corrective Action Taken.

- (e) To document the compliance status with Condition D.4.1(a) - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16).
- (f) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.4.13 Reporting Requirements

- (a) A quarterly summary of the information to document the compliance status with the SO₂ limit specified in Condition D.4.2 - Sulfur Dioxide (SO₂) shall be submitted not later than thirty (30) days after the end of the quarter being reported.
- (b) A quarterly report of opacity exceedances, as defined in 326 IAC 3-5-7, and a quarterly summary of the information to document status compliance with Conditions D.4.9 - Continuous Emissions Monitoring, and D.4.10 - Maintenance of Continuous Opacity Monitoring (COM) Equipment, shall be submitted not later than thirty (30) days after the end of the quarter being reported.

Pursuant to 326 IAC 3-5-7(c)(4), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

- (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.
- (c) A quarterly summary of the information to document the compliance status with Condition D.4.1(a) - Prevention of Significant Deterioration (PSD) shall be submitted not later than thirty (30) days after the end of the quarter being reported.
 - (d) Section C – General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.5 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (m) The clinker cooler facilities/emissions units, as follows:
- (1) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
 - (2) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
 - (3) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

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

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

D.5.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), PM and PM₁₀ emissions from baghouse KDC2 and baghouse KDC4 controlling Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU21) respectively shall each not exceed 11.41 pounds per hour.

Compliance with these limits, in conjunction with limits in D.1.1, D.2.1, D.3.1, and D.4.1, shall limit the PM and PM₁₀ emissions increases from the preheater modification to less than twenty-five (25) and fifteen (15) tons per year, respectively, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the preheater modification.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with the PM and PM₁₀ limits established in condition D.5.1 the Permittee shall perform PM and PM₁₀ from Clinker Cooler #1 and Clinker Cooler #2, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. These PM and PM₁₀ tests shall be conducted at least once every 2.5 years from the date of the most recent valid compliance demonstration.

D.5.4 Particulate Control

- (a) In order to comply with Condition D.5.1, the baghouses, identified as KDC2 and KDC4, shall be in operation and control emissions at all times when its associated clinker cooler is 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 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.5.5 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 326 IAC 2-1.1-11, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23), pursuant to 326 IAC 3-5-2. All continuous opacity monitors (COM) shall meet the performance specifications of 326 IAC 3-5-2 and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (b) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

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

D.5.6 Broken or Failed Bag Detection

- (a) 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).
- (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 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 line. 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).

D.5.7 Maintenance of Continuous Opacity Monitoring (COM) Equipment [326 IAC 2-7-5(3)(A)(iii)]

Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor opacity from the stack.

- (a) Visible Emission readings shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
- (b) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once twice per day during daylight operations, with at least four (4) hours between each set of readings until a COM is online.
- (c) Method 9 opacity readings may be discontinued once a COMS is online.
- (d) Any opacity exceedances determined by Method 9 opacity readings shall be reported in the Quarterly Opacity Exceedances Reports.

D.5.8 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), in order to provide reasonable assurance of compliance with Conditions D.5.1, the Permittee shall comply with the EU19 and EU21 PM and PM₁₀ monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry). Compliance with these monitoring requirements satisfies CAM for PM and PM₁₀ for EU19 and EU21.

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

D.5.9 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.5.3 - Testing Requirements, D.5.4 - Particulate Control, and D.5.7 - Maintenance of Continuous Opacity Monitoring (COM) Equipment, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with Conditions D.5.3, D.5.4, and D.5.7.
- (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
 - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.
- (b) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.5.10 Reporting Requirements

- (a) A quarterly report of opacity exceedances, as defined in 326 IAC 3-5-7, and a quarterly summary of the information to the document status compliance with Conditions D.5.5 - Continuous Emissions Monitoring and D.5.7 - Maintenance of Continuous Opacity Monitoring (COM) Equipment shall be submitted not later than thirty (30) days after the end of the quarter being reported.
- Pursuant to 326 IAC 3-5-7(c)(4), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
- (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.
- (b) Section C – General Reporting contains the Permittee’s obligation with to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC -7-1(35).

SECTION D.6 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

- (n) Calcium sulfate material facilities/emission units, consisting of the following:
- (1) Two (2) storage piles, identified as F10 and F12, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.
 - (2) One (1) synthetic gypsum hopper, identified as F11, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.
 - (3) One (1) synthetic gypsum weight belt, identified as F15, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.
 - (4) One (1) raw material hopper, identified as F13, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.
 - (5) One (1) raw material weight belt, identified as F16, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.
 - (6) One (1) main belt #1, identified as F17, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.
 - (7) One (1) enclosed CKD conveyor #1, identified as EU50, maximum throughput: 50 tons per hour.
 - (9) One (1) enclosed CKD conveyor #2, identified as EU51, approved for construction in 2004, maximum throughput: 50 tons per hour.
 - (10) One (1) enclosed pugmill, identified as EU49, approved for construction in 2004, maximum capacity: 100 tons per hour.
 - (11) One (1) main belt #2, identified as F18, approved for construction in 2004, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.
 - (12) One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, potential capacity: 0.10 acre.

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

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

D.6.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

Pursuant to Significant Source Modification 093-19158-00002 (issued November 5, 2004), the Permittee shall comply with the following conditions:

- (a) The material input to the synthetic gypsum and raw materials storage piles (F10 and F12) shall not exceed 50,000 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (b) The material input to the synthetic gypsum hopper (F11) shall not exceed 35,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (c) The material input to the synthetic gypsum weight belt (F15) shall not exceed 35,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (d) The material input to the raw material hopper (F13) shall not exceed 15,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (e) The material input to the raw material weight belt (F16) shall not exceed 15,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (f) The material input to the Main Belt #1 (F17) shall not exceed 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (g) The material input to the pugmill (EU49) shall not exceed 85,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (h) The material input to the Main Belt #2 (F18) shall not exceed 85,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.
- (i) The material input to the outdoor calcium sulfate material storage pile (F14) shall not exceed 85,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The PM emissions shall not exceed 0.0121 pounds per ton of material input, and the PM₁₀ emissions shall not exceed 0.0057 pounds per ton of material input.

Compliance with these limits, in conjunction with limits in D.1.1, D.2.1, and D.3.1, shall limit the PM and PM₁₀ emissions increase from the modification permitted in Significant Source Modification 093-19158-00002 to less than twenty-five (25) and fifteen (15) tons per year, respectively, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification.

D.6.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the synthetic gypsum hopper

(F11), the raw material hopper (F13), the synthetic gypsum weight belt (F15), the raw material weight belt (F16), the main belt #1 (F17), and the main belt #2 (F18) shall not exceed 51.3 pounds per hour, total, when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the CKD storage silo (EU48) (EU48 is described in Section D.3) and the pugmill (EU49) shall not exceed 44.6 pounds per hour, total, when operating at a process weight rate of 50 tons per hour.

- (c) The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

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

D.6.3 Record Keeping Requirements

- (a) To document the compliance status with Condition D.6.1 - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the material input to each process at the calcium sulfate material facilities/emission units. Records shall be complete and sufficient to demonstrate compliance with Condition D.6.1.
- (b) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.6.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.6.1- Prevention of Significant Deterioration (PSD) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.7 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)] Insignificant Activity

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 including one parts washer constructed in 1991.

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

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

D.7.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.7.2 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser facility, constructed after July 1, 1990, The Permittee 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 (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38⁰C) (one hundred degrees Fahrenheit (100⁰F));
 - (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 four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38⁰C) (one hundred degrees Fahrenheit (100⁰F)), 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 subsection (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 four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38⁰C) (one hundred degrees Fahrenheit (100⁰F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9⁰C) (one hundred twenty degrees Fahrenheit (120⁰F)):
 - (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 or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility, construction of which commenced after July 1, 1990, 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.

SECTION E.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)] Note: Complete Descriptions are shown in Section A.2.

- (d) The raw material handling and storage facilities/emissions units, as follows:
 - (3) One (1) material storage building, identified as F03.
- (e) Kiln #1 and Kiln #2 Alternative Fuel Delivery Systems as follows:
 - (1) One (1) Kiln #1 alternative fuel delivery system, identified as F19 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (2) One (1) Kiln #2 alternative fuel delivery system, identified as F20 (only the conveyor transfer points associated with this facility are considered affected sources).
- (f) The raw mill facilities/emissions units, as follows:
 - (1) One (1) raw mill #1, identified as EU11.
 - (2) One (1) raw mill #2, identified as EU12.
- (g) The raw mill storage facilities/emissions units, as follows:
 - (1) Blending bins, identified as EU13.
 - (2) Kiln supply silos, identified as EU14.
 - (3) One (1) kiln feed bin #1, identified as EU18.
 - (4) One (1) kiln feed bin #2, identified as EU20.
 - (5) One (1) kiln feed bin #3, identified as EU22.
- (h) The clinker handling facilities/emissions units, as follows:
 - (1) One (1) south storage drag, identified as EU25 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (2) One (1) north clinker tower, identified as EU26a (only the conveyor transfer points associated with this facility are considered affected sources).
 - (3) One (1) North storage drag, identified as EU26b (only the conveyor transfer points associated with this facility are considered affected sources).
 - (5) One (1) south clinker tower, identified as EU27 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (7) One (1) pan clinker conveyor, identified as EU29 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (9) One (1) roll crusher, identified as EU31.
- (i) The finish mill facilities/emissions units, as follows:
 - (1) One (1) finish mill #1 with associated feed bin, identified as EU32.
 - (2) One (1) finish mill #2 with associated feed bin, identified as EU33.
 - (3) One (1) finish mill #3 with associated feed bin, identified as EU34.
 - (4) One (1) finish mill #4 with associated feed bin, identified as EU35.
 - (5) One (1) finish mill #4 separator, identified as EU36.
 - (6) One (1) lime bin, identified as EU38.

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- (j) The finish material storage facilities/emissions units, as follows:
- (1) One (1) surge bin, identified as EU37.
 - (2) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B.
 - (3) A silo transfer system, identified as EU40A and EU40B.
- (k) The bulk loading and packaging facilities/emissions units, as follows:
- (1) One (1) east truck loadout bin, identified as EU41.
 - (2) One (1) east truck vaculoader, identified as EU42.
 - (3) One (1) west truck loadout bin, identified as EU43.
 - (4) One (1) west truck vaculoader, identified as EU44.
 - (5) One (1) truck loadout station, identified as F06.
 - (6) One (1) railroad loadout bin, identified as EU45.
 - (7) One (1) articuloader, identified as EU46.
 - (8) One (1) packing machine, identified as EU47.
- (l) The kiln facilities/emissions units, as follows:
- (1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003.
 - (2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and modified to a one-stage preheater kiln in July 2003.
 - (3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln.
- (m) The clinker cooler facilities/emissions units, as follows:
- (1) One (1) clinker cooler #1, identified as EU19.
 - (2) One (1) clinker cooler #2, identified as EU21.
 - (3) One (1) clinker cooler #3, identified as EU23.
- (n) Calcium sulfate material facilities/emission units, consisting of the following:
- (2) One (1) synthetic gypsum hopper, identified as F11.
 - (3) One (1) synthetic gypsum weight belt, identified as F15 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (4) One (1) raw material hopper, identified as F13.
 - (5) One (1) raw material weight belt, identified as F16 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (6) One (1) main belt #1, identified as F17 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (7) One (1) enclosed CKD conveyor #1, identified as EU50 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (8) One (1) CKD storage silo, identified as EU48.
 - (9) One (1) enclosed CKD conveyor #2, identified as EU51 (only the conveyor transfer points associated with this facility are considered affected sources).
 - (10) One (1) enclosed pugmill, identified as EU49.
 - (11) One (1) main belt #2, identified as F18 (only the conveyor transfer points associated with this facility are considered affected sources).

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

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]**

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

(a) Pursuant to 40 CFR 63, Subpart LLL, 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, except as otherwise specified in 40 CFR Part 63, Subpart LLL.

(b) Pursuant to 40 CFR 63.10, 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 National Emission Standards for Hazardous Air Pollutants from the Portland Cement
Manufacturing Industry [40 CFR Part 63, Subpart LLL]**

Pursuant to 40 CFR Part 63, Subpart LLL, on and after September 9, 2013, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (included as Attachment A of this permit) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011), for all the facilities listed in Section E.1, as specified as follows:

- (a) 40 CFR 63.1340
- (b) 40 CFR 63.1341
- (c) 40 CFR 63.1342
- (d) 40 CFR 63.1343(a)
- (e) 40 CFR 63.1343 (b)(1) Table 1 - Rows 1, 2, 3, 4, 9, 10, 13, 14, 15, and 16
- (f) 40 CFR 63.1343 (c) and (d)
- (g) 40 CFR 63.1344
- (h) 40 CFR 63.1345
- (i) 40 CFR 63.1346 (a), (b), and (f)
- (j) 40 CFR 63.1347
- (k) 40 CFR 63.1348 (a)(1), (a)(2), (a)(3)(i), (a)(3)(ii), (a)(4), (a)(5), and (a)(6)
- (l) 40 CFR 63.1348 (b), (c), and (d)
- (m) 40 CFR 63.1349 (a), (b)(1)(i), (b)(1)(ii), (b)(1)(iii), and (b)(2)
- (n) 40 CFR 63.1349 (b)(3)(i), (b)(3)(ii), (b)(3)(iii), and (b)(3)(iv)
- (o) 40 CFR 63.1349 (b)(4), (b)(5), (b)(6), (c), (d), and (e)
- (p) 40 CFR 63.1350 (a), (b), (d), (f), (g), (i), (j), (k), (l), (m), (n), (o), and (p)
- (q) 40 CFR 63.1351 (a), (b), and (c)
- (r) 40 CFR 63.1352
- (s) 40 CFR 63.1353
- (t) 40 CFR 63.1354
- (u) 40 CFR 63.1355
- (v) 40 CFR 63.1356
- (w) 40 CFR 63.1357
- (x) 40 CFR 63.1358
- (y) Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions

E.1.3 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry [40 CFR Part 63, Subpart LLL] [326 IAC 20-27]

Pursuant to 40 CFR Part 63, Subpart LLL, until September 9, 2013, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (included as Attachment B of this permit), *that were in effect or became effective December 20, 2006*, as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), for all the facilities listed in Section E.1, as specified as follows:

- (a) 40 CFR 63.1340
- (b) 40 CFR 63.1341
- (c) 40 CFR 63.1342
- (d) 40 CFR 63.1343 (a) and (b)
- (e) 40 CFR 63.1344 (a), (b), (f), (g), and (h)
- (f) 40 CFR 63.1345
- (g) 40 CFR 63.1347
- (h) 40 CFR 63.1348
- (i) 40 CFR 63.1349 (a)
- (j) 40 CFR 63.1349 (b)(1)(i), (b)(1)(ii), (b)(1)(iii), and (b)(1)(v)
- (k) 40 CFR 63.1349 (b)(2)
- (l) 40 CFR 63.1349 (b)(3)(i), (b)(3)(ii), (b)(3)(iii), and (b)(3)(iv)
- (m) 40 CFR 63.1349 (c), (d), and (e)
- (n) 40 CFR 63.1350 (a) and (b)
- (o) 40 CFR 63.1350 (c)(1) and (c)(3)
- (p) 40 CFR 63.1350 (d)(1) and (d)(3)
- (q) 40 CFR 63.1350 (e), (f), (i), (j), (l), (m), (o), and (p)
- (r) 40 CFR 63.1351 (a) and (c)
- (s) 40 CFR 63.1352
- (t) 40 CFR 63.1353
- (u) 40 CFR 63.1354 (a), (b)(1), (b)(2), (b)(3), (b)(4), (b)(5), (b)(6), (b)(7), (b)(9)(i), (b)(9)(ii), (b)(9)(iv), (b)(9)(v), and (b)(10)
- (v) 40 CFR 63.1355
- (w) 40 CFR 63.1356 [excluding (a)(1) and (a)(2)]
- (x) 40 CFR 63.1357
- (y) 40 CFR 63.1358
- (z) Table 1 to Subpart LLL of Part 63 - Applicability

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002

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:

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: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and• The Permittee must submit notice by mail or facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report for Use When Combusting Coal

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Kilns #1, 2, and 3
Parameter: Sulfur Dioxide (SO₂) from coal combustion
Limit: 6.0 pounds per million Btu heat input

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Coal Sulfur Content (%)	Monthly Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: The Primary crusher (EU01), Surge Bin and Transfer System (EU02), Secondary Crusher (EU03), Tertiary Crusher (EU04), North Screen House (EU05), The South Screen House (EU06), Belt 7/8 Conveyor Transfer Point (EU07), and Belt 8/9 Conveyor transfer point (EU08)
Parameter: Operating Time
Limit: 2,500 hours per twelve (12) consecutive month period, each, with compliance determined at the end of each month.

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Conveying System to Transport Raw Material to Storage (EU09) and Shale Crusher (EU10)
Parameter: Operating Time
Limit: 2,500 hours per twelve (12) consecutive month period, each, with compliance determined at the end of each month

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Lime Bin (EU38),
Parameter: Operating Time
Limit: 2,500 hours per twelve (12) consecutive month period, each, with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Finish Mill Surge Bin (EU37)
Parameter: Operating Time
Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
 Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
 Part 70 Permit No.: T093-24556-00002
 Facility: Railroad Loadout Bin (EU45) and Articuloader (EU46)
 Parameter: Operating Time
 Limit: 2,000 hours per 12 consecutive month period, each, with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Column 1	Column 1	Column 2	Column 1 + Column 2
	This Month	This Month	Previous 11 Months	12 Month Total
Month 1	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			
Month 2	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			
Month 3	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Packing Machine (EU47)
Parameter: Operating Time
Limit: 5,500 hours per 12 consecutive month period with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Kiln #1 (EU15) and Kiln #2 (EU16)
Parameter: Throughput
Limit: 321,875 tons each per twelve (12) consecutive month period, each, with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Facility	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Kiln #1			
	Kiln #2			
Month 2	Kiln #1			
	Kiln #2			
Month 3	Kiln #1			
	Kiln #2			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facilities: Storage Piles (F10 and F12)
Parameter: Material input
Limit: 50,000 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Synthetic Gypsum Hopper (F11), Synthetic Gypsum Weight Belt (F15), and CKD Silo (EU48)
Parameter: Material input
Limit: 35,000 tons per twelve (12) consecutive month period, each, with compliance determined at the end of each month

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Raw Material Hopper (F13) and Raw Material Weight Belt (F16)
Parameter: Material input
Limit: 15,000 tons per twelve (12) consecutive month period, each, with compliance determined at the end of each month

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Main Belt #1 (F17)
Parameter: Material input
Limit: 50,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER: _____

YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002
Facility: Pugmill (EU49), Main Belt #2 (F18), and Outdoor Calcium Sulfate Material Storage Pile (F14)
Parameter: Material input
Limit: 85,000 tons per twelve (12) consecutive month period, each, with compliance determined at the end of each month

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**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: Lehigh Cement Company LLC
Source Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Permit No.: T093-24556-00002

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

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:	

Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment A

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart LLL—National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry 64 FR 31925-31962 (June 14, 1999) [as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011)]

Source: 64 FR 31925, June 14, 1999, unless otherwise noted.

General

§ 63.1340 What parts of my plant does this subpart cover?

(a) The provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.

(b) The affected sources subject to this subpart are:

(1) Each kiln including alkali bypasses, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part;

(2) Each clinker cooler at any portland cement plant;

(3) Each raw mill at any portland cement plant;

(4) Each finish mill at any portland cement plant;

(5) Each raw material dryer at any portland cement plant;

(6) Each raw material, clinker, or finished product storage bin at any portland cement plant;

(7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant;

(8) Each bagging and bulk loading and unloading system at any portland cement plant; and

(9) Each open clinker pile at any portland cement plant.

(c) Crushers are not covered by this subpart regardless of their location.

(d) If you are subject to any of the provisions of this subpart you are also subject to title V permitting requirements.

[75 FR 55051, Sept. 9, 2010]

§ 63.1341 Definitions.

All terms used in this subpart that are not defined in this section have the meaning given to them in the CAA and in subpart A of this part.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Alkali bypass means a duct between the feed end of the kiln and the preheater tower through which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be referred to as the "kiln exhaust gas bypass".

Bagging system means the equipment which fills bags with portland cement.

Bin means a manmade enclosure for storage of raw materials, clinker, or finished product prior to further processing at a portland cement plant.

Clinker means the product of the process in which limestone and other materials are heated in the kiln and is then ground with gypsum and other materials to form cement.

Clinker cooler means equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.

Continuous monitor means a device which continuously samples the regulated parameter specified in §63.1350 of this subpart without interruption, evaluates the detector response at least once every 15 seconds, and computes and records the average value at least every 60 seconds, except during allowable periods of calibration and except as defined otherwise by the continuous emission monitoring system performance specifications in appendix B to part 60 of this chapter.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a facility. Conveying systems include but are not limited to the following: feeders, belt conveyors, bucket elevators and pneumatic systems.

Conveying system transfer point means a point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system.

Crusher means a machine designed to reduce large rocks from the quarry into materials approximately the size of gravel.

Dioxins and furans (D/F) means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

Enclosed storage pile means any storage pile that is completely enclosed in a building or structure consisting of a solid roof and walls.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Feed means the prepared and mixed materials, which include but are not limited to materials such as limestone, clay, shale, sand, iron ore, mill scale, cement kiln dust and flyash, that are fed to the kiln. Feed does not include the fuels used in the kiln to produce heat to form the clinker product.

Finish mill means a roll crusher, ball and tube mill or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill.

Greenfield kiln, in-line kiln/raw mill, or raw material dryer means a kiln, in-line kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no in-line kiln/raw mills were in operation at any time prior to March 24, 1998) after March 24, 1998.

Hazardous waste is defined in §261.3 of this chapter.

Inactive clinker pile is a pile of clinker material that has not been disturbed, removed, and/or added to as a result of loading, unloading, and/or transferring activities for 30 (thirty) consecutive days.

In-line kiln/raw mill means a system in a portland cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is capable of operating without the raw mill operating, but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means a device, including any associated preheater or precalciner devices, inline raw mills, or alkali bypasses that produces clinker by heating limestone and other materials for subsequent production of portland cement. Because the inline raw mill is considered an integral part of the kiln, for purposes of determining the appropriate emissions limit, the term kiln also applies to the exhaust of the inline raw mill.

Kiln exhaust gas bypass means alkali bypass.

Monovent means an exhaust configuration of a building or emission control device (e. g. positive pressure fabric filter) 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.

New brownfield kiln, in-line kiln raw mill, or raw material dryer means a kiln, in-line kiln/raw mill or raw material dryer for which construction is commenced at a plant site (where kilns and/or in-line kiln/raw mills were in operation prior to March 24, 1998) after March 24, 1998.

New source means any source that commenced construction after May 6, 2009, for purposes of determining the applicability of the kiln, clinker cooler and raw material dryer emissions limits for mercury, PM, THC, and HCl, and the requirements for open clinker storage piles.

One-minute average means the average of thermocouple or other sensor responses calculated at least every 60 seconds from responses obtained at least once during each consecutive 15 second period.

Operating day means any daily 24-hour period during which the kiln operates. For 30-day rolling averages, *operating days* include only days of normal operation and do not include periods of operation during startup or shutdown. For 7-day rolling averages, *operating days* include only days of operation during startup and shutdown and do not include periods of normal operation. Data attributed to an *operating day* includes all valid data obtained during the daily 24-hour period and excludes any measurements made when the kiln was not operating.

Portland cement plant means any facility manufacturing portland cement.

Raw material dryer means an impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed materials.

Raw mill means a ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Rolling average means the average of all one-minute averages over the averaging period.

Run average means the average of the one-minute parameter values for a run.

Sorbent means activated carbon, lime, or any other type of material injected into kiln exhaust for the purposes of capturing and removing any hazardous air pollutant.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

Total organic HAP means, for the purposes of this subpart, the sum of the concentrations of compounds of formaldehyde, benzene, toluene, styrene, m-xylene, p-xylene, o-xylene, acetaldehyde, and naphthalene as measured by EPA Test Method 320 of appendix A to this part or ASTM D6348-03. Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total organic HAP for this subpart.

Totally enclosed conveying system transfer point means a conveying system transfer point that is enclosed on all sides, top, and bottom.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 75 FR 55051, Sept. 9, 2010]

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indicating the applicability of the general provisions requirements to subpart LLL.

[71 FR 76549, Dec. 20, 2006]

§ 63.1343 What standards apply to my kilns, clinker coolers, raw material dryers, and open clinker piles?

(a) *General.* The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, and raw material dryer. All dioxin D/F, HCl, and total hydrocarbon (THC) emission limits are on a dry basis. The D/F, HCl and THC limits for kilns are corrected to 7 percent oxygen except during periods of startup and shutdown. The raw material dryer THC limits are corrected to 19 percent oxygen except during startup and shutdown. During startup and shutdown no oxygen correction is applied. All (THC) emission limits are measured as propane. Standards for mercury, PM, and THC are based on a 30-day rolling average, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. The 30-day and 7-day periods mean 30 and 7 consecutive operating days, respectively, where an operating day is any daily 24-hour period during which the kiln operates. Data attributed to an operating day includes all valid data obtained during the daily 24-hour period and excludes any measurements made when the kiln was not operating. If using a CEMS to determine compliance with the HCl standard, this standard is based on a 30-day rolling average, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. You must ensure appropriate corrections for moisture are made when measuring flowrates used to calculate particulate matter (PM) and mercury emissions.

(b)(1) *Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.* The emission limits for these sources are shown in table 1 below.

**Table 1—Emissions Limits for Kilns (Rows 1–8), Clinker Coolers (Rows 9–12),
 Raw Material Dryers (Rows 13–15), Raw and Finish Mills (Row 16)**

	If your source is	And the operating mode is:	And if is located	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
1.	An existing kiln	Normal operation	At a major or area source	PM—0.04 D/F—0.2 ¹ Mercury—55 THC—24 ^{2,3}	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
2.	An existing kiln	Normal operation	At a major source	HCl—3	ppmvd	7 percent.
3.	An existing kiln	Startup and shutdown	At a major or area source	PM—0.004 D/F—0.2 ¹ Mercury—10 THC—24 ^{2,3}	gr/dscf ng/dscm (TEQ) ug/dscm ppmvd	NA. NA. NA. NA.
4.	An existing kiln	Startup and shutdown	At a major source	HCl—3 ⁴	ppmvd	NA.
5.	A new kiln	Normal operation	At a major or area source	PM—0.01 D/F—0.2 ¹ Mercury—21 THC—24 ^{2,3}	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
6.	A new kiln	Normal operation	At a major source	HCl—3 ⁴	ppmvd	7 percent.
7.	A new kiln	Startup or shutdown	At a major or area source	PM—0.0008 D/F—0.2 ¹ Mercury—4 THC—24 ^{2,3}	gr/dscf ng/dscm (TEQ) ug/dscm ppmvd	NA. NA. NA. NA.
8.	A new kiln	Startup and shutdown	At a major source	HCl—3	ppmvd	NA.
9.	An existing clinker cooler	Normal operation	At a major or area source	PM—0.04	lb/ton clinker	NA.
10.	An existing clinker cooler	Startup and shutdown	At a major or area source	PM—0.004	gr/dscf	NA.
11.	A new clinker cooler	Normal operation	At a major or area source	PM—0.01	lb/ton clinker	NA.
12.	A new clinker cooler	Startup and shutdown	At a major or area source	PM—0.0008	gr/dscf	NA.
13.	An existing or new raw material dryer	Normal operation	At a major or area source	THC—24 ^{2,3}	ppmvd	19 percent.
14.	An existing or new raw material dryer	Startup and shutdown	At a major or area source	THC—24 ^{2,3}	ppmvd	NA.

	If your source is	And the operating mode is:	And if is located	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
15.	An existing or new raw material dryer	All operating modes	At a major source	Opacity—10	percent	NA.
16.	An Existing or new raw or finish mill	All operating modes	At a major source	Opacity-10	percent	NA.

¹If the average temperature at the inlet to the first particulate matter control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.4 ng/dscm (TEQ).

²Measured as propane.

³Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 9 ppmvd for total organic HAP. If the source demonstrates compliance with the total organic HAP under the requirements of §63.1349 then the source's THC limit will be adjusted to equal the average THC emissions measured during the organic HAP compliance test.

⁴If the kiln does not have a HCl CEM, the emissions limit is zero.

(2) When there is an alkali bypass associated with a kiln, the combined PM emissions from the kiln or in-line kiln/raw mill and the alkali bypass stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust with the kiln exhaust for energy efficiency purposes and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using the equation 1 of this section:

$$PM_{2.5} = 0.004 \times 1.65 \times (Q_k + Q_c) / 7000 \quad (\text{Eq. 1})$$

Where:

0.004 is the PM exhaust concentration (gr/dscf) equivalent to 0.04 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.

1.65 is the conversion factor of lb feed per lb clinker

Q_k is the exhaust flow of the kiln (dscf/ton raw feed)

Q_c is the exhaust flow of the clinker cooler (dscf/ton raw feed).

For new kilns that combine kiln exhaust and clinker cooler gas the limit is calculated using the equation 2 of this section:

$$PM_{2.5} = 0.0008 \times 1.65 \times ((Q_k + Q_c) / 7000) \quad (\text{Eq. 2})$$

Where:

0.0008 is the PM exhaust concentration (gr/dscf) equivalent to 0.01 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined

1.65 is the conversion factor of lb feed per lb clinker

Q_k is the exhaust flow of the kiln (dscf/ton raw feed)

Q_c is the exhaust flow of the clinker cooler (dscf/ton raw feed).

(c) If clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:

(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.

(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.

(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.

(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.

(d) If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.

(e) Emissions limits in effect prior to September 9, 2010. Any source defined as an existing source in §63.1351, and that was subject to a PM, mercury, THC, D/F, or opacity emissions limit prior to September 9, 2010, must continue to meet the limits shown in Table 2 to this section until September 9, 2013.

Table 2—Emissions Limits in Effect Prior to September 9, 2010, for Kilns (Rows 1–4), Clinker Coolers (Row 5), and Raw Material Dryers (Rows 6–9).

If your source is	and	And if it is located at	Your emissions limits are¹:	And the units of the emissions limit are:
1. An existing kiln	it commenced construction or reconstruction on or prior to December 2, 2005	A major source	PM—0.3 Opacity—20 D/F—0.2 ² THC—50 ³⁴	lb/ton feed percent ng/dscm (TEQ) ppmvd.
2. An existing kiln	it commenced construction or reconstruction after December 2, 2005	A major source	PM—0.3 Opacity—20 D/F—0.2 ² THC—20 ³⁵ Mercury—41 ⁶	lb/ton feed percent ng/dscm (TEQ) ppmvd ug/dscm.

If your source is	and	And if it is located at	Your emissions limits are ¹ :	And the units of the emissions limit are:
3. An existing kiln	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	D/F—0.2 ² THC—50 ³⁴	ng/dscm (TEQ) ppmvd.
4. An existing kiln	it commenced construction or reconstruction after December 2, 2005	An area source	D/F—0.2 ² THC—20 ³⁵ Mercury—41 ⁶	ng/dscm (TEQ) ppmvd ug/dscm.
5. An existing clinker cooler	NA	A major source	PM—0.1 Opacity—10	lb/ton feed percent.
6. An existing raw material dryer	it commenced construction or reconstruction on or prior to December 2, 2005	A major source	THC—50 ³⁴ Opacity—10	ppmvd percent.
7. An existing raw material dryer	it commenced construction or reconstruction after December 2, 2005	A major source	THC—20 ³⁵ Opacity—10	ppmvd percent.
8. An existing raw material dryer	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	THC—50 ³⁴	ppmvd.
9. An existing raw material dryer	it commenced construction or reconstruction after December 2, 2005	An area source	THC—20 ³⁵	ppmvd.

¹All emission limits expressed as a concentration basis (ppmvd, ng/dscm) are corrected to seven percent oxygen.

²If the average temperature at the inlet to the first particulate matter control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less, this limit is changed to 0.4 ng/dscm (TEQ).

³Measured as propane.

⁴Only applies to Greenfield kilns or raw material dryers.

⁵As an alternative, a source may demonstrate a 98 percent reduction in THC emissions from the exit of the kiln or raw material dryer to discharge to the atmosphere. Inline raw mills are considered to be an integral part of the kiln.

⁶As an alternative, a source may route the emissions through a packer bed or spray tower wet scrubber with a liquid-to-gas ratio of 30 gallons per 1000 actual cubic feet per minute or more and meet a site-specific emission limit based on the measured performance of the wet scrubber.

[75 FR 55053, Sept. 9, 2010, as amended at 76 FR 2835, Jan. 18, 2011]

§ 63.1344 Affirmative defense for exceedance of emission limit during malfunction.

In response to an action to enforce the standards set forth in paragraph §63.1343(b) you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the respondent fails to meet its burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a limit, the owners or operators of facilities must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, short, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, severe personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible; and

(7) Your actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) The owner or operator has prepared a written root cause analysis to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 30 days of the initial occurrence of the exceedance of the standard in §63.1343(b) to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section.

[75 FR 55053, Sept. 9, 2010]

§ 63.1345 Emissions limits for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills, and open clinker piles.

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.

[75 FR 55054, Sept. 9, 2010]

§ 63.1346 Operating limits for kilns.

(a) The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:

(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

(b) The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).

(c) For an affected source subject to a D/F emission limitation under §63.1343 that employs sorbent injection as an emission control technique you must operate the sorbent injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.

(1) The three-hour rolling average activated sorbent injection rate must be equal to or greater than the sorbent injection rate determined in accordance with §63.1349(b)(3)(vi).

(2) You must either:

(i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c), or

(ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).

(d) Except as provided in paragraph (e) of this section, for an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique you must specify and use the brand and type of sorbent used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.

(e) For an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique you may substitute, at any time, a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute sorbent will provide the same or better level of control as the original sorbent.

(f) No kiln may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent, unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (*i.e.*, emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline. Once the kiln must comply with a mercury limit specified in §63.1343, this paragraph no longer applies.

[75 FR 55054, Sept. 9, 2010]

§ 63.1347 Operation and maintenance plan requirements.

(a) You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:

(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;

(2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.

(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[75 FR 55054, Sept. 9, 2010]

§ 63.1348 Compliance requirements.

(a) *Initial compliance requirements.* For an affected source subject to this subpart, you must demonstrate initial compliance with the emissions standards and operating limits by using the test methods and procedures in §§63.1349 and 63.7.

(1) *PM compliance.* If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate initial compliance with the PM emissions standards by using the test methods and procedures in §63.1349(b)(1).

(i) You must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(1)(i).

(ii) Compliance with the PM emissions standard must be determined based on the first 30 operating days you operate a PM CEMS.

(2) *Opacity compliance.* If you are subject to the limitations on opacity under §63.1345, you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in

§63.1349(b)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.

(3) *D/F compliance.* (i) If you are subject to limitations on D/F emissions under §63.1343(b), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in §63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance.

(ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the temperature operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(ii) through (b)(3)(iv). The average of the run temperatures will determine the applicable temperature limit.

(iii) If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the activated carbon injection rate operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(v). The average of the run injection rates will determine the applicable injection rate limit.

(iv) If activated carbon injection is used, you must also develop a carrier gas parameter during the performance test conducted under §63.1349(b)(3) that meets the requirements of §63.1349(b)(3)(vi). Compliance is demonstrated if the system is maintained within ± 5 percent accuracy during the performance test.

(4)(i) *THC compliance.* If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate initial compliance with the THC emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(i). The average THC concentration obtained during the first 30 operating days must be used to determine initial compliance.

(ii) *Total organic HAP emissions tests.* If you elect to demonstrate compliance with the total organic HAP emissions limit under §63.1343(b) in lieu of the THC emissions limit, you must demonstrate initial compliance with the total organic HAP emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(iii) and (b)(4)(iv).

(iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in §63.1349(b)(4)(iii) while the raw mill kiln is operating and while the raw mill of the kiln is not operating.

(iv) The average total organic HAP concentration measured during the initial performance test specified by §63.1349(b)(4)(iii) must be used to determine initial compliance.

(v) The average THC concentration measured during the initial performance test specified by §63.1349(b)(4)(iv) must be used to determine the site-specific THC limit. This limit should be a weighted average of the THC levels measured during raw mill on and raw mill off testing.

(5) *Mercury compliance.* If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate initial compliance with the mercury standards by using the performance test methods and procedures in §63.1349(b)(5). You must demonstrate initial compliance by operating a mercury CEMS or a sorbent trap based integrated monitor. The first 30 operating days of daily mercury concentration data must be used to determine initial compliance.

(6) *HCl compliance.* If you are subject to limitations on HCl emissions under §63.1343(b), you must demonstrate initial compliance with the HCl standards by using the performance test methods and procedures in §63.1349(b)(6).

(i) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(6)(i). The HCl concentration must be determined for

each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance. You must also have established appropriate site-specific parameter limits.

(ii) For an affected source that is not equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by operating a CEMS as specified in §63.1349(b)(6)(ii). The average hourly HCl concentration obtained during the first 30 operating days must be used to determine initial compliance.

(b) *Continuous compliance requirements.* You must demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.

(1) *General requirements.* (i) You must monitor and collect data according to §63.1350 and the site-specific monitoring plan required by §63.1350(o).

(ii) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating. Any period for which data collection is required and the operation of the CEMS is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(iii) You may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator must use all the data collected during all other periods in assessing the operation of the control device and associated control system

(iv) *Clinker production.* If you are subject to limitations on PM emissions (lb/ton of clinker) or mercury (lb/MM tons of clinker) under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by determining the hourly production rate of clinker according to the requirements of §63.1350(d).

(2) *PM compliance.* If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) and (d).

(i) *PM CEMS.* You must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) for each affected source subject to PM emissions limitations. Continuous compliance is demonstrated by a 30-day rolling average PM emissions in lb/ton clinker, except for periods of startup and shutdown, where the compliance is demonstrated based on a 7-day rolling average.

(3) *Opacity compliance.* If you are subject to the limitations on opacity under §63.1345, you must demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in §63.1350(f).

(i) Continuous compliance is demonstrated by conducting specified visible emissions observations and follow up opacity readings, as indicated in §63.1350(f)(1) and (f)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard. Corrective actions must be initiated within one hour of detecting visible emissions.

(ii) *COMS.* If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the COMS such that it meets the requirements of §63.1350(f)(4)(i).

(iii) *BLDS*. If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the BLDS such that it meets the requirements of §63.1350(f)(4)(ii).

(4) *D/F compliance*. If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the temperature operating limits specified in §63.1346 by using the installing, operating, and maintaining a continuous monitor to record the temperature of specified gas streams such that it meets the requirements of §63.1350(g). Continuous compliance is demonstrated by a 3-hour rolling average temperature.

(5)(i) *Activated carbon injection compliance*. If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the activated carbon injection rate operating limits specified in §63.1346 by installing, operating, and maintaining a continuous monitor to record the rate of activated carbon injection that meets the requirements of §63.1350(h)(1). Continuous compliance is demonstrated by a 3-hour rolling average injection rate.

(ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the activated carbon injection system gas parameter by installing, operating, and maintaining a continuous monitor to record the gas parameter that meets the requirements of §63.1350(h)(2). Continuous compliance is demonstrated by a 3-hour rolling average of the parameter value.

(6) *THC compliance*. If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate continuous compliance with the THC emissions standards by using the monitoring methods and procedures in §63.1350 (i) and (j). Continuous compliance is demonstrated by a 30-day rolling average THC concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.

(7) *Mercury compliance*. If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate continuous compliance with the mercury standards by using the monitoring methods and procedures in §63.1350(k). Continuous compliance is demonstrated by a 30-day rolling average mercury emission rate in lb/MM tons clinker, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average mercury concentration.

(8) *HCl compliance*. If you are subject to limitations on HCl emissions under §63.1343(b), you must demonstrate continuous compliance with the HCl standards by using the performance test methods and procedures in §63.1349(b)(6).

(i) For an affected source that is not equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(l)(1). Continuous compliance is demonstrated by a 30-day rolling average HCl concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.

(ii) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(l)(2). Continuous compliance is demonstrated by a 30-day rolling average of the required parameters, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.

(c) *Changes in operations*. (1) If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b).

(2) In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in (c)(2)(i) through (c)(2)(iv) of this section are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.

(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a

description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of this section, including when the planned operational change period would begin.

(ii) The performance test results must be documented in a test report according to §63.1349(a).

(iii) A test plan must be made available to the Administrator prior to performance testing, if requested.

(iv) The performance test must be conducted completed within 360 hours after the planned operational change period begins.

(d) *General duty to minimize emissions.* At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 55055, Sept. 9, 2010]

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

(a) Performance test results must be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), the site-specific plan to be followed during performance testing must be made available to the Administrator prior to testing, if requested.

(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;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the performance 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 parameters for monitoring; and

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

(b)(1) *PM emissions tests.* (i)(A) If you are subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b).

(B) You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in §63.1350(m)(5).

(C) The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained.

(ii) You must determine the clinker production rate using the methods in §63.1350(d).

(iii) The emission rate, E, of PM (lb/ton of clinker) must be computed for each run using equation 3 of this section:

$$E = (C_s Q_s) / (PK) \quad (\text{Eq. 3})$$

Where:

E = emission rate of particulate matter, lb/ton of clinker production;

C_s = concentration of particulate matter, gr/scf;

Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (either wet or dry), scf/hr;

P = total kiln clinker production rate, ton/hr; and

K = conversion factor, 7000 gr/lb.

(iv) When there is an alkali bypass associated with a kiln, the main exhaust and alkali bypass of the kiln must be tested simultaneously and the combined emission rate of particulate matter from the kiln and alkali bypass must be computed for each computed for each run using equation 4 of this section:

$$E_c = \frac{[(C_{sk} Q_{sk}) + (C_{sb} Q_{sb})]}{K P} \quad (\text{Eq. 4})$$

Where:

E_c = combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, lb/ton of kiln clinker production;

C_{sk} = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent gas, gr/scf;

Q_{sk} = volumetric flow rate of kiln or in-line kiln/raw mill effluent gas, where C_{sk} and Q_{sk} are on the same basis (either wet or dry), scf/hr;

C_{sb} = concentration of particulate matter in the alkali bypass gas, gr/scf;

Q_{sb} = volumetric flow rate of alkali bypass effluent gas, where C_{sb} and Q_{sb} are on the same basis (either wet or dry), scf/hr;

P = total kiln clinker production rate, ton/hr; and

K = conversion factor, 1000 g/kg (7000 gr/lb).

(2) *Opacity tests.* If you are subject to limitations on opacity under this subpart, you must conduct opacity tests in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

- (i) There are no individual readings greater than 10 percent opacity;
- (ii) There are no more than three readings of 10 percent for the first 1-hour period.

(3) *D/F emissions tests.* If you are subject to limitations on D/F emissions under this subpart, you must conduct a performance test using Method 23 of appendix A–7 to part 60 of this chapter. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass must conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

- (i) Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).
- (ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and, where applicable, the temperature at the inlet to the alkali bypass PMCD must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.
- (iii) Hourly average temperatures must be calculated for each run of the performance test.
- (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).
- (v)(A) If sorbent injection is used for D/F control, the rate of sorbent injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test in accordance with the conditions in §63.1350(m)(9), and the continuous injection rate record(s) must be included in the performance test report. Sorbent injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.
- (B) The performance test report must include the brand and type of sorbent used during the performance test.
- (C) The owner or operator must maintain a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the performance test. If the carrier gas flow rate is used, the owner or operator must determine, record, and maintain a record of the accuracy of the carrier gas flow rate monitoring system according to the procedures in appendix A to part 75 of this chapter. If the carrier gas pressure drop is used, the owner or operator must determine, record, and maintain a record of the accuracy of the carrier gas pressure drop monitoring system according to the procedures in §63.1350(m)(6).
- (vi) The run average sorbent injection rate must be calculated for each run and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(4)(i) *THC CEMS relative accuracy test.* (A) If you are subject to limitations on THC emissions, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(1). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard

(B) The initial compliance test must be based on the first 30 operating days of operation in which the affected source operates using a CEMS.

(ii) *Total organic HAP emissions tests.* Instead of conducting the performance test specified in paragraph (b)(4)(i) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(4)(iii) through (b)(4)(iv) of this section.

(iii) Method 320 of appendix A to this part or ASTM D6348–03 (incorporated by reference— See §63.14) must be used to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run must be conducted for at least 1 hour.

(iv) At the same time that you are conducting the performance test for total organic HAP, you must also determine THC emissions by operating a CEMS in accordance with the requirements of §63.1350(j). The duration of the performance test must be 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated.

(5) *Mercury emissions tests.* If you are subject to limitations on mercury emissions, you must operate a mercury CEMS in accordance with the requirements of §63.1350(k). The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly mercury concentration and stack gas volumetric flow rate data must be obtained. If you use a sorbent trap monitoring system, daily data must be obtained with each day assumed to equal the daily average of the sorbent trap collection period covering that day.

(i) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in §63.1350(k)(4).

(ii) The emission rate must be computed by dividing the average mercury emission rate by the clinker production rate during the same 30-day rolling period using the equation 5 of this section:

$$E = (C_s Q_s) / (PK) \quad (\text{Eq. 5})$$

Where:

E = emission rate of mercury, lb/million tons of clinker production;

C_s= concentration of mercury, g/scm;

Q_s= volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (wet or dry), scm/hr;

P = total kiln clinker production rate, million ton/hr; and

K = conversion factor, 1000 g/kg (454 g/lb).

(6) *HCl emissions tests.* For a source subject to limitations on HCl emissions you must conduct performance testing by one of the following methods:

(i)(A) If the source is equipped with a wet scrubber, or tray tower, you must conduct performance testing using Method 321 of appendix A to this part unless you have installed a CEMS that meets the requirements §63.1350(l)(1) .

(B) You must establish site specific parameter limits by using the CPMS required in §63.1350(l)(1). Measure and record the pressure drop across the scrubber and/or liquid flow rate and pH in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average pressure drop, pH, and average scrubber water flow rate for each sampling run in which the applicable emissions limit is met.

(ii)(A) If the source is not controlled by a wet scrubber, you must operate a CEMS in accordance with the requirements of §63.1350(l)(1). The initial performance test must be the first 30 operating days you use the CEMS.

(B) The initial compliance test must be based on the 30 operating days in which the affected source operates using a CEMS. Hourly HCl concentration and stack gas volumetric flow rate data must be obtained.

(c) *Performance test frequency.* Except as provided in §63.1348(b), performance tests are required for affected sources that are subject to a dioxin, total organic HAP, or HCl, emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS.

(d) *Performance test reporting requirements.*

(1) You must submit the information specified in paragraphs (d)(1)(i) and (d)(2) of this section no later than 60 days following the initial performance test. All reports must be signed by the facility's manager.

(i) The initial performance test data as recorded under paragraph (b) of this section.

(ii) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(3), (b)(4)(iii), (b)(5)(ii), and (b)(6)(i) of this section, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.

(2) As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT) (see http://www.epa.gov/ttn/chief/ert/ert_tool.html/).

(e) Performance tests must be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[75 FR 55057, Sept. 9, 2010]

§ 63.1350 Monitoring requirements.

(a) All continuous monitoring data for periods of startup and shutdown must be compiled and averaged separately from data gathered during periods of normal operation.

(b) *PM monitoring requirements for sources using PM CEMS.* (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.

(2) You must perform Relative Response Audits annually and Response Correlation Audits every 3 years.

(3) If you are using a PM CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (n)(10) of this section.

(4) In order to calculate the 30-day or 7-day rolling average, collect readings at least every 15 minutes. Sum the hourly data to daily data and then into a 30-day rolling average. You must use all data, except those recorded during

monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities, in calculations.

(c) [Reserved]

(d) *Clinker production monitoring requirements.* If you are subject to an emissions limitation on particulate matter, mercury, NO_x, or SO₂ emissions (lb/ton of clinker), you must:

(1) Determine hourly clinker production by one of two methods:

(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ± 5 percent accuracy.

(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ± 5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.

(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).

(3) Record the daily clinker production rates and kiln feed rates; and

(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.

(e) [Reserved]

(f) *Opacity monitoring requirements.* If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of this section and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of this section and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of this section.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2)(i) For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes.

(ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (a)(5)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (a)(5)(i) of the section, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes.

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

(4) The requirements under paragraph (f)(2) of this section to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).

(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS–1 of appendix B to part 60 of this chapter.

(ii) If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply.

(g) *D/F monitoring requirements.* If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs (g)(1) through (g)(6) and paragraphs (m)(1) through (m)(4) of this section to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(1) You must install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PMCDs.

(i) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1349(b)(3)(iv).

(ii) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(iii) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.

(2) You must monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.

(3) The required minimum data collection frequency must be one minute.

(4) Each hour, calculate the three-hour average temperature for the previous 3 hours of process operation using all of the one-minute data available (*i.e.*, the CMS is not out-of-control.)

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

(h) *Monitoring requirements for sources using sorbent injection.* If you are subject to an operating limit on D/F emissions that employs carbon injection as an emission control technique, you must comply with the additional monitoring requirements of paragraphs (h)(1) and (h)(2) and paragraphs (m)(1) through (m)(4) and (m)(9) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(1) Install, operate, calibrate, and maintain a continuous monitor to record the rate of activated carbon injection. The accuracy of the rate measurement device must be ± 1 percent of the rate being measured.

(i) Verify the calibration of the device at least once every three months.

(ii) Each hour, calculate the three-hour rolling average activated carbon injection rate for the previous 3 hours of process operation using all of the one-minute data available (*i.e.*, the CMS is not out-of-control.)

(iii) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average activated carbon injection rate must begin anew, without considering previous recordings.

(2)(i) Install, operate, calibrate, and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the D/F performance test in accordance with §63.1349(b)(3).

(ii) Each hour, calculate the three-hour rolling average of the selected parameter value for the previous 3 hours of process operation using all of the one-minute data available (*i.e.*, the CMS is not out-of-control.)

(i) *THC Monitoring Requirements.* If you are subject to an emissions limitation on THC emissions, you must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(1) You must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter.

(2) For sources equipped with an alkali bypass stack, instead of installing a CEMS, you may use the results of the initial or subsequent performance test to demonstrate compliance with the THC emission limit.

(j) *Total organic HAP monitoring requirements.* If you are complying with the total organic HAP emissions limits, you must continuously monitor THC according to paragraph (i)(1) and (2) or in accordance with Performance Specification 15 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. In addition, you must follow the monitoring requirements in paragraphs (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(k) *Mercury monitoring requirements.* If you have a kiln or in-line kiln/raw mill subject to an emissions limitation on mercury emissions, you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter. You must continuously monitor mercury according to paragraphs (k)(1) through (k)(3) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(1) The span value for any Hg CEMS must include the intended upper limit of the mercury concentration measurement range during normal "mill on" operation which may be exceeded during "mill off" operation or other short term conditions lasting less than 24 consecutive kiln operating hours. However, the span should be at least equivalent to approximately two times the emissions standard and it may be rounded to the nearest multiple of $10 \mu\text{g}/\text{m}^3$ of total mercury.

(2) You must operate and maintain each Hg CEMS or sorbent trap-based integrated monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter.

(3) Relative accuracy testing of mercury monitoring systems under Performance Specification 12A, Performance Specification 12B, or Procedure 5 must be at normal operating conditions with the raw mill on.

(4) If you use a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (n)(10) of this section.

(l) *HCl Monitoring Requirements.* If you are subject to an emissions limitation on HCl emissions in §63.1343, you must continuously monitor HCl according to paragraph (l)(1) and (2) and paragraphs (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.

(1) Continuously monitor compliance with the HCl limit by operating a continuous emission monitor in accordance with Performance Specification 15 of appendix B to part 60 of this chapter. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of 40 CFR of appendix F to part 60 of this chapter except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of Performance Specification 15, or

(2) Install, operate, and maintain a CMS to monitor wet scrubber parameters as specified in paragraphs (m)(5) and (m)(7) of this section.

(m) *Parameter monitoring requirements.* If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in

paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.

(1) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must conduct all monitoring in continuous operation at all times that the unit is operating.

(3) Determine the 3-hour block average of all recorded readings.

(4) Record the results of each inspection, calibration, and validation check.

(5) *Liquid flow rate monitoring requirements.* If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (m)(5)(i) through (iv) of this section.

(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(ii) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

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

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

(6) *Specific pressure monitoring requirements.* If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (m)(6)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

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

(iii) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(iv) Check pressure tap pluggage daily.

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

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

(7) *Specific pH monitoring requirements.* If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (m)(7)(i) through (iii) of this section.

(i) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(ii) Ensure the sample is properly mixed and representative of the fluid to be measured.

(iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(8) [Reserved]

(9) *Mass flow rate (for sorbent injection) monitoring requirements.* If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (m)(9)(i) through (iii) of this section.

(i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(10) *Bag leak detection monitoring requirements.* If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.

(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.

(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.

(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(11) For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

(n) *Continuous emissions rate monitoring system.* You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) and (2) of this section, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit.

(1) You must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury or PM CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.

(2) The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate.

(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.

(4) The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (n)(1) of this section.

(5) The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.

(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.

(7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of this chapter for a discussion of CD).

(i) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).

(ii) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.

(8) You must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to Part 60 of the chapter with the exceptions in paragraphs (n)(8)(i) and (n)(8)(ii) of this section.

(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.

(ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.

(9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (n)(8).

(10) You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

(o) *Alternate monitoring requirements approval.* You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

(2) If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

(3) You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (m)(3)(i) through (iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

(4) The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

(5) You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

(p) *Development and submittal (upon request) of monitoring plans.* If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (n) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (o)(5) of this section.

(1) For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (o)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

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

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.

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

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(5) *BLDS monitoring plan.* Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;

(i) Installation of the BLDS;

(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;

(iii) Operation of the BLDS, including quality assurance procedures;

(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the BLDS output will be recorded and stored.

[75 FR 55059, Sept. 9, 2010, as amended at 76 FR 2836, Jan. 18, 2011]

§ 63.1351 Compliance dates.

(a) The compliance date for any affected existing source subject to any rule requirements that were in effect before December 20, 2006, is:

(1) June 14, 2002, for sources that commenced construction before or on March 24, 1998, or

(2) June 14, 1999 or startup for sources that commenced construction after March 24, 1998.

(b) The compliance date for any affected existing source subject to any rule requirements that became effective on December 20, 2006, is:

(1) December 21, 2009, for sources that commenced construction after December 2, 2005 and before or on December 20, 2006, or

(2) Startup for sources that commenced construction after December 20, 2006.

(c) The compliance date for existing sources for all the requirements that became effective on November 8, 2010 will be September 9, 2013.

(d) The compliance date for new sources is November 9, 2010 or startup, whichever is later.

[76 FR 2836, Jan. 18, 2011]

§ 63.1352 Additional test methods.

(a) If you are conducting tests to determine the rates of emission of HCl from kilns and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340, you may use Method 320 or Method 321 of appendix A of this part.

(b) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at Portland cement manufacturing facilities, solely for use in applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.

[75 FR 55063, Sept. 9, 2010]

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:

(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by §§63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).

(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by §63.9(h).

§ 63.1354 Reporting requirements.

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);

(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and

(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).

(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).

(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).

(vi) Monthly rolling average mercury, THC, PM, and HCl (if applicable) emissions levels in the units of the applicable emissions limit for each kiln, clinker cooler, and raw material dryer.

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

(c) The semiannual report required by paragraph (b)(9) of this section must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1348(d), including actions taken to correct a malfunction.

[64 FR 31925, June 14, 1999, as amended at 75 FR 55063, Sept. 9, 2010]

§ 63.1355 Recordkeeping requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the daily clinker production rates and kiln feed rates.

(f) You must keep records of the occurrence and duration of each startup or shutdown.

(g)(1) You must keep records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006; 75 FR 55064, Sept. 9, 2010]

Other

§ 63.1356 Sources with multiple emission limits or monitoring requirements.

If an affected facility subject to this subpart has a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.

[75 FR 55064, Sept. 9, 2010]

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

(a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any particulate matter and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and in-line kiln/raw mills.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.

(b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results,

including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002]

§ 63.1358 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a 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 U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

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

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§ 63.1359 [Reserved]

Table 1 to Subpart LLL of Part 63—Applicability of General Provisions

Table 1 to Subpart LLL of Part 63—Applicability of General Provisions

Citation	Requirement	Applies to subpart LLL	Explanation
63.1(a)(1)–(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved]
63.1(a)(6)–(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)–(14)	Applicability	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)–(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)–(5)	Extensions, Notifications	Yes.	
63.1(d)		No	[Reserved]
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)–(c)	Units and Abbreviations	Yes	
63.4(a)(1)–(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
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	[Reserved]
63.5(b)(3)–(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]
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	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)–(2)	Compliance Dates	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.6(c)(3)–(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)–(2)	Operation & Maintenance	No	See §63.1348(d) for general duty requirement. Any reference to §63.6(e)(1)(i) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1348(d).
63.6(e)(3)	Startup, Shutdown Malfunction Plan	No	
63.6(f)(1)	Compliance with Emission Standards	No	Compliance obligations specified in subpart LLL.
63.6(f)(2)–(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)–(3)	Alternative Standard	Yes	
63.6(h)(1)	Opacity/VE Standards	No	Compliance obligations specified in subpart LLL.
63.6(h)(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]
63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)–(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)–(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)–(3)	Performance Testing Requirements	Yes	§63.1349 has specific requirements.
63.7(b)	Notification	Yes	
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.7(e)(1)	Conduct of Tests	No	See §63.1349(e). Any reference to 63.7(e)(1) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1349(e).
63.7(e)(2)–(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	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)–(3)	Conduct of Monitoring	Yes	
63.8(c)(1)–(8)	CMS Operation/Maintenance	Yes	Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes, except for the reference to the SSM Plan in the last sentence	
63.8(e)	Performance Evaluation for CMS	Yes	
63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)–(5)	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	Notification not required for VE/opacity test under §63.1350(e) and (j).

Citation	Requirement	Applies to subpart LLL	Explanation
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)–(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)–(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	Yes	
63.10(b)(1)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(i)–(ii)	General Recordkeeping Requirements	No	See §63.1355(g) and (h).
63.10(b)(2)(iii)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(iv)–(v)	General Recordkeeping Requirements	No	
63.10(b)(2)(vi)–(ix)	General Recordkeeping Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(2)–(4)		No	[Reserved]
63.10(c)(5)–(8)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]
63.10(c)(10)–(15)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
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	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	No	See §63.1354(c) for reporting requirements. Any reference to §63.10(d)(5) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1354(c).

Citation	Requirement	Applies to subpart LLL	Explanation
63.10(e)(1)–(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
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	Yes	
63.15(a)–(b)	Availability of Information	Yes	

[75 FR 55064, Sept. 9, 2010]

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment B

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart LLL—National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry 64 FR 31925-31962 (June 14, 1999) [as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), and 71 FR 76549-76552 (Dec. 20, 2006)]

Source: 64 FR 31925, June 14, 1999, unless otherwise noted.

General

§ 63.1340 Applicability and designation of affected sources.

(a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.

(b) The affected sources subject to this subpart are:

(1) Each kiln and each in-line kiln/raw mill at any major or area source, including alkali bypasses, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to and regulated under subpart EEE of this part;

(2) Each clinker cooler at any portland cement plant which is a major source;

(3) Each raw mill at any portland cement plant which is a major source;

(4) Each finish mill at any portland cement plant which is a major source;

(5) Each raw material dryer at any portland cement plant which is a major source and each greenfield raw material dryer at any portland cement plant which is a major or area source;

(6) Each raw material, clinker, or finished product storage bin at any portland cement plant which is a major source;

(7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant which is a major source; and

(8) Each bagging and bulk loading and unloading system at any portland cement plant which is a major source.

(c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.

(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72584, Dec. 6, 2002]

§ 63.1341 Definitions.

All terms used in this subpart that are not defined in this section have the meaning given to them in the CAA and in subpart A of this part.

Alkali bypass means a duct between the feed end of the kiln and the preheater tower through which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be referred to as the "kiln exhaust gas bypass".

Bagging system means the equipment which fills bags with portland cement.

Bin means a manmade enclosure for storage of raw materials, clinker, or finished product prior to further processing at a portland cement plant.

Clinker cooler means equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.

Continuous monitor means a device which continuously samples the regulated parameter specified in §63.1350 of this subpart without interruption, evaluates the detector response at least once every 15 seconds, and computes and records the average value at least every 60 seconds, except during allowable periods of calibration and except as defined otherwise by the continuous emission monitoring system performance specifications in appendix B to part 60 of this chapter.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a facility. Conveying systems include but are not limited to the following: feeders, belt conveyors, bucket elevators and pneumatic systems.

Conveying system transfer point means a point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system.

Dioxins and furans (D/F) means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Feed means the prepared and mixed materials, which include but are not limited to materials such as limestone, clay, shale, sand, iron ore, mill scale, cement kiln dust and flyash, that are fed to the kiln. Feed does not include the fuels used in the kiln to produce heat to form the clinker product.

Finish mill means a roll crusher, ball and tube mill or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill.

Greenfield kiln, in-line kiln/raw mill, or raw material dryer means a kiln, in-line kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no in-line kiln/raw mills were in operation at any time prior to March 24, 1998) after March 24, 1998.

Hazardous waste is defined in §261.3 of this chapter.

In-line kiln/raw mill means a system in a portland cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is capable of operating without the raw mill operating,

but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means a device, including any associated preheater or precalciner devices, that produces clinker by heating limestone and other materials for subsequent production of portland cement.

Kiln exhaust gas bypass means alkali bypass.

Monovent means an exhaust configuration of a building or emission control device (e. g. positive pressure fabric filter) 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.

New brownfield kiln, in-line kiln raw mill, or raw material dryer means a kiln, in-line kiln/raw mill or raw material dryer for which construction is commenced at a plant site (where kilns and/or in-line kiln/raw mills were in operation prior to March 24, 1998) after March 24, 1998.

One-minute average means the average of thermocouple or other sensor responses calculated at least every 60 seconds from responses obtained at least once during each consecutive 15 second period.

Portland cement plant means any facility manufacturing portland cement.

Raw material dryer means an impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed materials.

Raw mill means a ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Rolling average means the average of all one-minute averages over the averaging period.

Run average means the average of the one-minute parameter values for a run.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002]

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indicating the applicability of the general provisions requirements to subpart LLL.

[71 FR 76549, Dec. 20, 2006]

§ 63.1343 Standards for kilns and in-line kiln/raw mills.

(a) *General.* The provisions in this section apply to each kiln, each in-line kiln/raw mill, and any alkali bypass associated with that kiln or in-line kiln/raw mill. All gaseous, mercury and D/F emission limits are on a dry basis, corrected to 7 percent oxygen. All total hydrocarbon (THC) emission limits are measured as propane. The block

averaging periods to demonstrate compliance are hourly for 20 ppmv total hydrocarbon (THC) limits and monthly for the 50 ppmv THC limit.

(b) *Existing kilns located at major sources.* No owner or operator of an existing kiln or an existing kiln/raw mill located at a facility that is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources, any gases which:

(1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(c) *Reconstructed or new kilns located at major sources.* No owner or operator of a reconstructed or new kiln or reconstructed or new inline kiln/raw mill located at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the bypass stack are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(4) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(5) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41 µg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 µg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

(d) *Existing kilns located at area sources.* No owner or operator of an existing kiln or an existing in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(2) Contain D/F in excess of 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(e) *New or reconstructed kilns located at area sources.* No owner or operator of a new or reconstructed kiln or new or reconstructed in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(2) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(3) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41 µg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 µg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

[71 FR 76549, Dec. 20, 2006]

§ 63.1344 Operating limits for kilns and in-line kiln/raw mills.

(a) The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:

(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded.

(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded.

(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded.

(b) The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).

(c) The owner or operator of an affected source subject to a mercury, THC or D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.

- (1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).
- (2) The owner or operator shall either:
 - (i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c), or
 - (ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).
- (d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a mercury, THC or D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.
- (e) The owner or operator of an affected source subject to a D/F, THC, or mercury emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.
- (f) Existing kilns and in-line kilns/raw mills must implement good combustion practices (GCP) designed to minimize THC from fuel combustion. GCP include training all operators and supervisors to operate and maintain the kiln and calciner, and the pollution control systems in accordance with good engineering practices. The training shall include methods for minimizing excess emissions.
- (g) No kiln and in-line kiln/raw mill may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e. emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline.
- (h) All kilns and in-line kilns/raw mills must remove (i.e. not recycle to the kiln) from the kiln system sufficient cement kiln dust to maintain the desired product quality.
- (i) New and reconstructed kilns and in-line kilns/raw mills must not exceed the average hourly CKD recycle rate measured during mercury performance testing. Any exceedance of this average hourly rate is considered a violation of the standard.

[64 FR 31925, June 14, 1999, as amended at 67 FR 72585, Dec. 6, 2002; 71 FR 76550, Dec. 20, 2006]

§ 63.1345 Standards for clinker coolers.

- (a) No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the clinker cooler any gases which:
 - (1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 lb per ton) of feed (dry basis) to the kiln.
 - (2) Exhibit opacity greater than ten percent.

(b) [Reserved]

§ 63.1346 Standards for new or reconstructed raw material dryers.

(a) New or reconstructed raw material dryers located at facilities that are major sources can not discharge to the atmosphere any gases which:

(1) Exhibit opacity greater than ten percent, or

(2) Contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

(b) New or reconstructed raw materials dryers located at a facility that is an area source cannot discharge to the atmosphere any gases which contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

[71 FR 76551, Dec. 20, 2006]

§ 63.1347 Standards for raw and finish mills.

The owner or operator of each new or existing raw mill or finish mill at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged from the mill sweep or air separator air pollution control devices of these affected sources any gases which exhibit opacity in excess of ten percent.

§ 63.1348 Standards for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

(a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.

(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;

- (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 parameters for compliance monitoring; and
- (10) Any other information required by the test method.

(b) Performance tests to demonstrate initial compliance with this subpart shall be conducted as specified in paragraphs (b)(1) through (b)(4) of this section.

(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section. The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. The opacity exhibited during the period of the Method 5 of Appendix A to part 60 of this chapter performance tests required by paragraph (b)(1)(i) of this section shall be determined as required in paragraphs (b)(1)(v) through (vi) of this section.

(i) Method 5 of appendix A to part 60 of this chapter shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run shall be conducted for at least 1 hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the PM collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of this subpart. However, this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or inline kiln/raw mill feed rate, except for fuels, for each run.

(iii) The emission rate, E, of PM shall be computed for each run using equation 1:

$$E = (C_s Q_{sd}) / P \text{ (Eq. 1)}$$

Where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

c_s = concentration of PM, kg/dscm.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(iv) When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the main exhaust and alkali bypass of the kiln or in-line kiln/raw mill shall be tested simultaneously and the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk}Q_{sdk} + C_{sb}Q_{sdb})/P \text{ (Eq. 2)}$$

Where:

E_c = the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, kg/Mg of kiln feed.

C_{sk} = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent, kg/dscm.

Q_{sdk} = volumetric flow rate of kiln or in-line kiln/raw mill effluent, dscm/hr.

C_{sb} = concentration of particulate matter in the alkali bypass gas, kg/dscm.

Q_{sdb} = volumetric flow rate of alkali bypass gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph (b)(1)(vi) of this section the opacity exhibited during the period of the Method 5 performance tests required by paragraph (b)(1)(i) of this section shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(vi) Each owner or operator of a kiln, in-line kiln/raw mill, or clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (b)(1)(v) of this section, conduct an opacity test in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. If the control device exhausts through a monovalent, or if the use of a COM in accordance with the installation specifications of Performance Specification 1 (PS-1) of appendix B to part 60 of this chapter is not feasible, a test shall be conducted in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. The maximum six-minute average opacity shall be determined during the three Method 5 test runs, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (ii) of this section apply:

(i) There are no individual readings greater than 10 percent opacity;

(ii) There are no more than three readings of 10 percent for the first 1-hour period.

(3) The owner or operator of an affected source subject to limitations on D/F emissions under this subpart shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of appendix A to part 60 of this chapter. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct

a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(4)(i) The owner or operator of an affected source subject to limitations on emissions of THC shall demonstrate initial compliance with the THC limit by operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 of this chapter. The duration of the performance test shall be three hours, and the average THC concentration (as calculated from the one-minute averages) during the three-hour performance test shall be calculated. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating.

(ii) The owner or operator of an affected source subject to limitations on emissions of THC who elects to demonstrate compliance with the alternative THC emission limit of 98 percent weight reduction must demonstrate compliance by also operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 at the inlet to the THC control device of the kiln, inline kiln raw mill, or raw materials dryer in the same manner as prescribed in paragraph (i) above. Alternately, you may elect to demonstrate a 98 weight percent reduction in THC across the control device using the performance test requirements in 40 CFR part 63, subpart SS.

(5) The owner or operator of a kiln or in-line kiln/raw mill subject to the 41 µg/dscm mercury standard shall demonstrate compliance using EPA Method 29 of 40 CFR part 60. ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), is an acceptable alternative to EPA Method 29 (portion for mercury only). If the kiln has an in-line raw mill, you must demonstrate compliance with both raw mill off and raw mill on. You must record the hourly recycle rate of CKD during both test conditions and calculate an average hourly rate for the three test runs for each test condition.

(c) Except as provided in paragraph (e) of this section, performance tests required under paragraphs (b)(1) and (b)(2) of this section shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

(d) Performance tests required under paragraph (b)(3) of this section shall be repeated every 30 months.

(e)(1) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable D/F standard under this subpart, the source must conduct a performance test and establish new temperature limit(s) as specified in paragraph (b)(3) of this section.

(2) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable PM standard under §63.1343, the source must conduct a performance test as specified in paragraph (b)(1) of this section.

(3) In preparation for and while conducting a performance test required in paragraph (e)(1) of this section, a source may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in paragraphs (e)(3)(i) through (iv) of this section are met. The source shall submit temperature and other monitoring data that are recorded during the pretest operations.

(i) The source must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph shall include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (e)(1) of this section, including when the planned operational change period would begin.

(ii) The performance test results must be documented in a test report according to paragraph (a) of this section.

(iii) A test plan must be made available to the Administrator prior to testing, if requested.

(iv) The performance test must be conducted, and it must be completed within 360 hours after the planned operational change period begins.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1350 Monitoring requirements.

(a) The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;

(2) Corrective actions to be taken when required by paragraph (e) of this section;

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year; and

(4) Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph (a) of this section shall be a violation of the standard.

(c) The owner or operator of a kiln or in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources including alkali bypasses in accordance with paragraphs (c)(1) through (c)(3) of this section.

(1) Except as provided in paragraph (c)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a kiln or in-line kiln/raw mill subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (c)(1) of this section, monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.

(d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs (d)(1) through (d)(3) of this section.

(1) Except as provided in paragraph (d)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (d)(1) of this section, monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.

(e) The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources in accordance with the procedures of Method 22 of appendix A to part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

(1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs (a)(1) and (a)(2) of this section; and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of appendix A to part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

(f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs (f)(1) through (f)(6) of this section.

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PM control devices.

(i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in §63.1349(b)(3)(iv).

(ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.

(3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

(6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

(g) The owner or operator of an affected source subject to an emissions limitation on D/F, THC or mercury emissions that employs carbon injection as an emission control technique shall comply with the monitoring requirements of paragraphs (f)(1) through (f)(6) and (g)(1) through (g)(6) of this section to demonstrate continuous compliance with the D/F, THC or mercury emissions standard.

(1) Install, operate, calibrate and maintain a continuous monitor to record the rate of activated carbon injection. The accuracy of the rate measurement device must be ± 1 percent of the rate being measured.

(2) Verify the calibration of the device at least once every three months.

(3) The three-hour rolling average activated carbon injection rate shall be calculated as the average of 180 successive one-minute average activated carbon injection rates.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off, the calculation of the three-hour rolling average activated carbon injection rate must begin anew, without considering previous recordings.

(6) The owner or operator must install, operate, calibrate and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the mercury, THC or D/F performance test in accordance with paragraphs (g)(6)(i) through (g)(6)(iii) of this section.

(i) The owner or operator shall install, calibrate, operate and maintain a device to continuously monitor and record the parameter value.

(ii) The owner or operator must calculate and record three-hour rolling averages of the parameter value.

(iii) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average shall be added to the previous 179 values to calculate the three-hour rolling average.

(h) The owner or operator of an affected source subject to a limitation on THC emissions under this subpart shall comply with the monitoring requirements of paragraphs (h)(1) through (h)(3) of this section to demonstrate continuous compliance with the THC emission standard:

(1) The owner or operator shall install, operate and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A, of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.

(2) The owner or operator is not required to calculate hourly rolling averages in accordance with section 4.9 of Performance Specification 8A if they are only complying with the 50 ppmv THC emissions limit.

(3) For facilities complying with the 50 ppmv THC emissions limit, any thirty-day block average THC concentration in any gas discharged from a greenfield raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a greenfield in-line kiln/raw mill, exceeding 50 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(4) For new facilities complying with the 20 ppmv THC emissions limit, any hourly average THC concentration in any gas discharged from a raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a kiln or in-line kiln/raw mill, exceeding 20 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.

(j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.

(k) The owner or operator of an affected source subject to a particulate matter standard under §63.1343 shall install, calibrate, maintain, and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. All requirements relating to installation, calibration, maintenance, operation or performance of the PM CEMS and implementation of the PM CEMS requirement are deferred pending further rulemaking.

(l) An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (l)(1) through (l)(6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section, unless the owner or operator documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

(2) If the application to use an alternate monitoring requirement is approved, the owner or operator must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

(3) The owner or operator shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (l)(3)(i) through (l)(3)(iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

(4) The Administrator will notify the owner or operator of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.

(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provision of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

(m) The requirements under paragraph (e) of this section to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the owner or operator chooses to install a COM in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter. To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the owner or operator chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, the requirements in paragraphs (m)(1) through (9) of this section apply to each BLDS:

(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. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 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 activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.

(4) The presence of an alarm condition should be clearly apparent to facility operating personnel.

(5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple

bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997).

(7) The baseline output of the system must be established as follows:

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

(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 operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in §63.2 certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

(9) The owner or operator must maintain and operate the fabric filter such that the bag leak 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 block period. Each time the alarm activates, 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 fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The owner or operator must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

(n) Any kiln or kiln/in-line raw mill using a control device (other than ACI) to comply with a mercury emissions limit or equipment standard will monitor the control device parameters as specified in 40 CFR part 63 subpart SS.

(o) For kilns and in-line kilns/raw mills complying with the requirements in Section 63.1344(g), each owner or operator must obtain a certification from the supplier for each shipment of fly ash received to demonstrate that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control. The certification shall include the name of the supplier and a signed statement from the supplier confirming that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of emission control.

(p) If the facility opts to use a fly ash derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control and demonstrate that the use of this fly ash does not increase mercury emissions, they must obtain daily fly ash samples, composites monthly, and analyze the samples for mercury.

[64 FR 31925, June 14, 1999, as amended at 64 FR 53070, Sept. 30, 1999; 67 FR 16620, Apr. 5, 2002; 67 FR 44769, July 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1351 Compliance dates.

(a) Except as noted in paragraph (c) below, the compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is June 14, 2002.

(b) Except as noted in paragraph (d) below, the compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998, is June 14, 1999, or upon startup of operations, whichever is later.

(c) The compliance date for an existing source to meet the requirements of GCP for THC is December 20, 2007.

(d) The compliance date for a new source which commenced construction after December 2, 2005, and before December 20, 2006 to meet the THC emission limit of 20 ppmv/98 percent reduction or the mercury standard of 41 µg/dscm or a site-specific standard based on application of a wet scrubber will be December 21, 2009.

[71 FR 76552, Dec. 20, 2006]

§ 63.1352 Additional test methods.

(a) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Method 320 or Method 321 of appendix A of this part.

(b) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Methods 26 or 26A of appendix A to part 60 of this chapter, except that the results of these tests shall not be used to establish status as an area source.

(c) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:

(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by §§63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).

(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by §63.9(h).

§ 63.1354 Reporting requirements.

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that

contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);

(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and

(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).

(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).

(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

§ 63.1355 Recordkeeping requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the amount of CKD recycled on an hourly basis.

(f) You must keep records of all fly ash supplier certifications as required by §63.1350(o).

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006]

Other

§ 63.1356 Exemption from new source performance standards.

(a) Except as provided in paragraphs (a)(1) and (2) of this section, any affected source subject to the provisions of this subpart is exempt from any otherwise applicable new source performance standard contained in subpart F or subpart OOO of part 60 of this chapter.

(1) Kilns and in-line kiln/raw mills, as applicable, under 40 CFR 60.60(b), located at area sources are subject to PM and opacity limits and associated reporting and recordkeeping, under 40 CFR part 60, subpart F.

(2) Greenfield raw material dryers, as applicable under 40 CFR 60.60(b), located at area sources, are subject to opacity limits and associated reporting and recordkeeping under 40 CFR part 60, subpart F.

(b) The requirements of subpart Y of part 60 of this chapter, "Standards of Performance for Coal Preparation Plants," do not apply to conveying system transfer points used to convey coal from the mill to the kiln that are associated with coal preparation at a portland cement plant that is a major source under this subpart.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006]

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

(a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any particulate matter and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and in-line kiln/raw mills.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.

(b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results, including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002]

§ 63.1358 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a 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 U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

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

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§ 63.1359 [Reserved]

Table 1 to Subpart LLL of Part 63—Applicability of General Provisions

Citation	Requirement	Applies to Subpart LLL	Explanation
63.1(a)(1)–(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved]
63.1(a)(6)–(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)–(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)–(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)–(5)	Extensions, Notifications	Yes	
63.1(d)		No	[Reserved]

Citation	Requirement	Applies to Subpart LLL	Explanation
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)–(c)	Units and Abbreviations	Yes	
63.4(a)(1)–(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
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	[Reserved]
63.5(b)(3)–(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]
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	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)–(2)	Compliance Dates	Yes	
63.6(c)(3)–(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)–(2)	Operation & Maintenance	Yes	
63.6(e)(3)	Startup, Shutdown Malfunction Plan	Yes	
63.6(f)(1)–(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)–(3)	Alternative Standard	Yes	
63.6(h)(1)–(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]

Citation	Requirement	Applies to Subpart LLL	Explanation
63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)–(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)–(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)–(3)	Performance Testing Requirements	Yes	§63.1349 has 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	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)–(3)	Conduct of Monitoring	Yes	
63.8(c)(1)–(8)	CMS Operation/Maintenance	Yes	Performance specification supersedes requirements for THC CEMS Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes	
63.8(e)	Performance Evaluation for CMS	Yes	Performance specification supersedes requirements for THC CEMS.
63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)–(5)	Initial Notifications	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
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	Notification not required for VE/opacity test under §63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)–(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)–(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	Yes	
63.10(b)	General Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(2)–(4)		No	[Reserved]
63.10(c)(5)–(8)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]
63.10(c)(10)–(15)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
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	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	Yes	
63.10(e)(1)–(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
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	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.14(a)-(b)	Incorporation by Reference	Yes	
63.15(a)-(b)	Availability of Information	Yes	

[67 FR 16622, Apr. 5, 2002]

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[Subpart LLL--NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE PORTLAND CEMENT MANUFACTURING INDUSTRY](#)

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a
Part 70 Administrative Amendment**

Source Description and Location

Source Name:	Lehigh Cement Company LLC
Source Location:	180 N. Meridian Rd., Mitchell, IN 47446
County:	Lawrence
SIC Code:	3241 (Cement, Hydraulic)
Operation Permit No.:	T 093-24556-00002
Operation Permit Issuance Date:	March 7, 2012
Administrative Amendment No.:	093-32611-00002
Permit Reviewer:	Heath Hartley

Existing Approvals

The source was issued Part 70 Operating Permit No. T 093-24556-00002 on March 7, 2012. The source has since received the following approvals:

County Attainment Status

The source is located in Lawrence County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

- (a) **Ozone Standards**
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. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Lawrence County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
Lawrence County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5}, NO_x, and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
 Lawrence County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO₂ and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a Portland Cement plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)	
Pollutant	Tons/year
PM	Greater than 100
PM ₁₀	Greater than 100
PM _{2.5}	Greater than 100
SO ₂	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO _x	Greater than 100
GHGs as CO ₂ e	Greater than 100,000
Single HAP	Greater than 10
Total HAP	Greater than 25

- (a) This existing stationary source is major for PSD because the emissions of at least one criteria pollutant are greater than one hundred (>100) tons per year, and it is in one of the twenty-eight (28) listed source categories.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Lehigh Cement Company LLC on December 10, 2012, relating to the use of additional alternative fuels in kiln #3 (EU17). These two additional alternative fuels are a blended fuel of coal and clean and/or treated wood and coal and engineered fuel. After this modification, all three kilns will be able to operate using the same fuels.

- The modification consists of allowing the use of additional alternative fuels in kiln #3 (EU17).
- (3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2.

Kiln #3 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #3 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #3 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input.

- The existing Alternate Fuel Delivery System will be modified to allow the use of alternative fuels. Instead of a separate system for Kiln #1 and Kiln #2, there will only be one Alternative Fuel Delivery System for all three kilns, with a total throughput of 262,800 tons per year. There are no new emission units associated with this modification.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

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

The following table is used to determine the appropriate permit level. This table reflects the PTE before controls of the modification. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process / Emission Unit	PM	PM₁₀	PM_{2.5}
Emissions Prior to Modification	1.06	0.50	0.076
Emissions After Modification	1.59	0.75	0.114
Emissions Increase	0.53	0.25	0.038

Pursuant to 326 IAC 2-7-11(a)(7), this change to the permit qualifies as an administrative permit amendment, since it is a modification to existing emission units that results in an increase of emissions that does not require a Source Modification pursuant to 326 IAC 2-7-10.5 or a Permit Modification pursuant to 326 IAC 2-7-12, and revises descriptive information that does not trigger a new applicable requirement or violate permit term.

Permit Level Determination – PSD

Lehigh Cement Company LLC (Lehigh) has provided information as part of the application for this approval that based on Actual to Projected Actual test (ATPA) in 326 IAC 2-2-2, this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8.

As part of the following ATPA analysis, Lehigh submitted that firing of blended fuel of coal and clean and/or treated wood and coal and engineered fuel in kiln #3 will not increase capacity. Nor will any upstream and/or downstream emissions units experience increased utilization.

Summary of ATPA Evaluation	SO2	NOx	CO
<i>Actual To Projected Actual (ATPA) (tpy) - Kiln #3 (Worst Case**)</i>			
Baseline (tons/year)	741.24	1,396.53	166.51
Could Have Accommodated (CHA)* (tons/year)	177.51	334.44	39.88
Projected Actuals (tons/year)	763.96	767.29	262.98
Emissions Increase Kiln #3 - ATPA (tons/year)	< 0	< 0	56.59
PSD Significant Level (tons/year)	40	40	100

*Could have accommodated production is based on the maximum monthly clinker production multiplied by 12 months. Clinker production is determined by consumer demand, which fluctuates throughout the year.

**Worst case shown is blended fuel of coal and clean and/or treated wood.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

There are no changes to CAM requirements as a result of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination – PSD section.

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Alternate Fuel Delivery System shall not exceed 40 pounds per hour when operating at a process weight rate of 30 tons per hour. The pound per hour limitation was calculated with the following equation:

- (a) Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{matrix} E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour} \end{matrix}$$

Summary of Process Weight Rate Limits			
Process / Emission Unit	P (ton/hr)	E (lb/hr)	Equation Used
kiln #1 alternative fuel delivery system	40	49.2	(a)
kiln #2 alternative fuel delivery system	40	49.2	(a)
Alternate Fuel Delivery System	30	40.0	(a)

Instead of a separate system for Kiln #1 and Kiln #2, there will only be one Alternative Fuel Delivery System for all three kilns, with a total throughput of 30 tons per hour.

Lehigh can comply with this limit without the use of a control device.

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.

There are no changes to compliance determination requirements or compliance monitoring requirements as a result of this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T093-24556-00002. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: Emission unit descriptions in Sections A.2, D.2, and D.4 and the requirements of 326 IAC 6-3-2 in Condition D.2.2 have been revised as follows to include the use of blended fuel of coal and clean and/or treated wood and coal and engineered fuel. Instead of a separate system for Kiln #1 and Kiln #2, there will only be one Alternative Fuel Delivery System for all three kilns, with a total throughput of 262,800 tons per year:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

.....

(e) ~~Kiln #1, Kiln #2 Alternative Fuel Delivery Systems as follows:~~

(1) ~~One (1) Kiln #1 alternative fuel delivery system, identified as F19, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 87,600~~**262,800** tons per year.

(2) ~~One (1) Kiln #2 alternative fuel delivery system, identified as F20, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 87,600 tons per year.~~

.....

(l) The kiln facilities/emissions units, as follows:

.....

(3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production

rate of 43 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2.

Kiln #3 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #3 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #3 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input.

.....

SECTION D.2 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)] (e) Kiln #1, Kiln #2 Alternative Fuel Delivery Systems as follows: (1) — One (1) Kiln #1 alternative fuel delivery system, identified as F19, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 87,600 262,800 tons per year. (2) — One (1) Kiln #2 alternative fuel delivery system, identified as F20, approved for construction in 2006, consisting of a partially enclosed hopper exhausting to the atmosphere and a series of totally enclosed conveyors, with a nominal throughput of 87,600 tons per year. (The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

.....

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the following operations shall not exceed the listed particulate emission rate (pounds per hour) (total for all facilities/emission units combined within each operation) when operating at the listed process weight rate.

Condition	Unit ID	Unit Description	Process Weight Rate (tons/hr)	Particulate Emission Rate (lbs/hr)
D.2.2(a)	EU09	raw material conveying system	200	58.5
D.2.2(b)	EU10	shale crusher	200	58.5
D.2.2(c)	EU11	raw mill #1	100	51.3
D.2.2(d)	EU12	raw mill #2	100	51.3
D.2.2(e)	F19	kiln #1 alternative fuel delivery system	40	49.2

Condition	Unit ID	Unit Description	Process Weight Rate (tons/hr)	Particulate Emission Rate (lbs/hr)
D.2.2(f)	F20	kiln #2 alternative fuel delivery system	10	19.2
D.2.2(e)	F19	Alternate Fuel Delivery System	30	40.0

.....

SECTION D.4 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(14)]

(l) The kiln facilities/emissions units, as follows:

.....

(3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with particulate emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2.

Kiln #3 is also permitted to use a blended fuel of coal and pressed paper-making waste where the blend has a maximum of 20% pressed paper-making waste by heat input.

Kiln #3 is permitted to use a blended fuel of coal and clean and/or treated wood where the blend has a maximum of up to 35% clean and/or treated wood by heat input.

Kiln #3 may also burn a blended fuel of coal and engineered fuel where the blend has a maximum of up to twenty percent (20%) engineered fuel by heat input.

.....

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

Other Changes

The changes listed below have been made to Part 70 Operating Permit No. T093-24556-00002. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

1. On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revision resulted in a change to the rule site of the "responsible official" definition. The rule site for responsible official has changed from 326 IAC 2-7-1(34) to 326 IAC 2-7-1(35). All occurrences of 326 IAC 2-7-1(34) have been changed to 326 IAC 2-7-1(35) throughout the permit.
2. On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions included the incorporation of the U.S. EPA's definition of reasonable possibility. The permit previously sited to the EPA definition. Neither of these changes are changes to the underlining provisions. The change is only to site of these rules in Section C - General Reporting and Section C - General Recordkeeping.

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
[326 IAC 2-2][326 IAC 2-3]

.....

(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)~~ **326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)**) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

.....

(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)~~ **326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)**) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

.....

3. IDEM, OAQ, has decided to clarify Condition D.1.6, D.2.8 and D.3.7, Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

D.1.6 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: primary crusher (EU01), surge bin and transfer system (EU02), secondary crusher (EU03), tertiary crusher (EU04), north screen house (EU05), south screen house (EU06), belt #7 to belt #8 conveyor transfer point (EU07), belt #8 to belt #9 conveyor transfer point (EU08), cement kiln dust (CKD) bin (EU24), CKD truck unloading system (EU24A), and CKD mixer (EU24B).

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per month when the associated facility/emissions unit is in operation. ~~When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response.~~ **When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

.....

D.2.8 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the following units: conveying system to transport raw material to storage (EU09), shale crusher (EU10), raw mill #1 (EU11), and raw mill #2 (EU12).

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per month when the associated facility/ emissions unit is in operation. ~~When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response.~~ **When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

.....

D.3.7 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

.....

The Permittee shall record the pressure drop across each baghouse listed in this section at least once per month when the associated facility/emission units are in operation and venting to the atmosphere. ~~When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response.~~ **When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

.....

4. The word "status" has been added to Section D - Record Keeping Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

D.6.3 Record Keeping Requirements

- (a) To document **the** compliance **status** with Condition D.6.1 - Prevention of Significant Deterioration (PSD), the Permittee shall maintain records of the material input to each process at the calcium sulfate material facilities/emission units. Records shall be complete and sufficient to demonstrate compliance with Condition D.6.1.

.....

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Heath Hartley 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) 232-8217 or toll free at 1-800-451-6027 extension 232-8217.
- (b) A copy of the findings 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

**Appendix A: Emission Calculations
APTA Summary**

Source Name: Lehigh Cement Company, LLC
Source Location: 180 N. Meridian Rd., Mithcell, IN 47446
Permit Number: 093-32611-00002
Permit Reviewer: Heath Hartley
App. Date: December 10, 2012

Coal and Clean and/or Treated Wood Blend for Kiln #3

Process / Emission Unit	SO ₂	NO _x	CO
Baseline Clinker Production (tpy)	268,564	268,564	268,564
Baseline Emissions (tpy)	741.24	1,396.53	166.51
Baseline Emission Factor Avg. (lb/ton clinker)	5.52	10.40	1.24
Max Actual Clinker Production (ton/month)	28,035.90	28,035.90	28,035.90
Max Actual Clinker Production (ton/yr)	336,431	336,431	336,431
Projected Actual Clinker Production Limit (ton/yr)	332,880	332,880	332,880
Could Have Accomodated (CHA) Clinker Production (ton/yr)	64,316	64,316	64,316
Baseline Emission Factor Avg. (lb/ton clinker)	5.52	10.4	1.24
Could Have Accomodated (CHA) Emissions (ton/yr)	177.51	334.44	39.88
Projected Actual Emission Factor (lb/ton clinker)	4.59	4.61	1.58
Projected Actual Clinker Production (ton/yr)	332,880	332,880	332,880
Projected Actual Emissions (ton/yr)	763.96	767.29	262.98

Coal and Engineered Fuel for Kiln #3

Process / Emission Unit	SO ₂	NO _x	CO
Baseline Clinker Production (tpy)	268,564	268,564	268,564
Baseline Emissions (tpy)	741.24	1,396.53	166.51
Baseline Emission Factor Avg. (lb/ton clinker)	5.52	10.40	1.24
Max Actual Clinker Production (ton/month)	28,036	28,036	28,036
Max Actual Clinker Production (ton/yr)	336,432	336,432	336,432
Projected Actual Clinker Production Limit (ton/yr)	332,880	332,880	332,880
Could Have Accomodated (CHA) Clinker Production (ton/yr)	64,316	64,316	64,316
Baseline Emission Factor Avg. (lb/ton clinker)	5.52	10.4	1.24
Could Have Accomodated (CHA) Emissions (ton/yr)	177.51	334.44	39.88
Projected Actual Emission Factor (lb/ton clinker)	1.77	4.70	1.29
Projected Actual Clinker Production (ton/yr)	332,880	332,880	332,880
Projected Actual Emissions (ton/yr)	294.6	782.3	214.7

1) The baseline period is April 2005 - March 2007

2) Projected Actual Clinker Production (ton/yr) is based on an average annual production rate of 38 ton/hr applied over an operating schedule of 8760 hours. This value is slightly less than the maximum hourly production rate observed during the baseline period of 38.4 tons per hour. Use of this factor is appropriate, as combustion of alternative fuels in Kiln #3 is not being implemented with the intent of increasing actual production.

3) Projected actual emission factors are the greater of the emission factors used for use of treated wood as fuel in Kiln #1 and Kiln #2 as preseneted in the application for Permit No. 093-21778-00002. Based on the similarities between Kiln #1, Kiln #2 and Kiln #3, these emission factors are representative of emissions for use of treated wood as fuel in Kiln #3. The projected actual emission factors for the kilns while using 65% coal / 35% treated wood are based on:

a. For CO the highest stack test results from stack tests conducted on the kilns since July 2003.

b. For NO_x and SO₂, a factor from the US DOE study: Pilot-Scale Air Toxics R&D Assessment of Cresoote-Treated and PCP-treated wood Cofirming for Pulverized Coal Utility Boiler Applications was applied to the highest stack test results from stack tests conducted on the kilns since July 2003.

Methodology

Baseline Clinker Production (tpy) = sum of monthly clinker production for 24 months / 2

Baseline Emissions (tpy) = sum of monthly emissions for 24 months / 2

Baseline Emission Factor (lb/ton clinker) = Baseline Emissions (ton/yr) x 2000 lb/ton / Baseline Clinker production (ton/yr)

Max Actual Clinker Production (ton/month) = is maximum monthly clinker production in the 24 month baseline period

CHA Clinker Production (ton/yr) = Max Actual Clinker Production (ton/month) x 12 - Baseline Clinker Production (ton/yr)

If Max Actual Clinker Production (ton/yr) exceeds the Projected Actual Clinker Production Limit (ton/yr), then Projected Actual Clinker Production Limit - Baseline Clinker Production (ton/yr)

CHA Emissions (ton/yr) = CHA Clinker Production (ton/yr) x Baseline Emission Factor (lb/ton clinker) x 1 ton/2000 lb

Projected Actual Emissions (ton/yr) = Proj Actual Clinker Production (ton/yr) x Proj Actual EF (lb/ton clinker) / 2000 lb

**Appendix A: Emission Calculations
Emissions from the Fuel Delivery System**

Source Name: Lehigh Cement Company, LLC
Source Location: 180 N. Meridian Rd., Mithcell, IN 47446
Permit Number: 093-32611-00002
Permit Reviewer: Heath Hartley
App. Date: December 10, 2012

PTE of Fuel Delivery System Before Modification

Fuel Delivery System Operation	Potential Throughput	PM factor (lb/ton)	PM10 factor (lb/ton)	PM2.5 factor (lb/ton)	Emissions PM (tpy)	Emissions PM 10 (tpy)	Emissions PM 2.5 (tpy)
Truck unloading into fuel hopper	175,200	0.0121	0.0057	0.0009	1.06	0.50	0.08
Truck of alternative fuel from alternative fuel hopper onto conveyor	175,200	Total Enclosure			0	0	0
Transfer of alternative fuel from conveyor into conveyor discharge chute	175,200	Total Enclosure			0	0	0
Transfer of alternative fuel from conveyor discharge chute into Pfister	175,200	Total Enclosure			0	0	0
Transfer of alternative fuel from Pfister into fuel delivery pipe	175,200	Total Enclosure			0	0	0
Transfer of alternative fuel from fuel delivery pipe into burner pipe.	175,200	Total Enclosure			0	0	0
Transfer of alternative fuel from fuel delivery pipe into burner pipe to kiln.	175,200	Total Enclosure			0	0	0
Truck unloading into fuel hopper	175,200	Total Enclosure			0	0	0
Total					1.06	0.50	0.08

Methodology

Emission Factors based on AP-42 Section 13.2.4 as shown in Permit 093-21778-00002.

PTE of Fuel Delivery System After Modification

Fuel Delivery System Operation	Potential Throughput	PM factor (lb/ton)	PM10 factor (lb/ton)	PM2.5 factor (lb/ton)	Emissions PM (tpy)	Emissions PM 10 (tpy)	Emissions PM 2.5 (tpy)
Truck unloading into fuel hopper	262,800	0.0121	0.0057	0.0009	1.59	0.75	0.11
Truck of alternative fuel from alternative fuel hopper onto conveyor	262,800	Total Enclosure			0	0	0
Transfer of alternative fuel from conveyor into conveyor discharge chute	262,800	Total Enclosure			0	0	0
Transfer of alternative fuel from conveyor discharge chute into Pfister	262,800	Total Enclosure			0	0	0
Transfer of alternative fuel from Pfister into fuel delivery pipe	262,800	Total Enclosure			0	0	0
Transfer of alternative fuel from fuel delivery pipe into burner pipe.	262,800	Total Enclosure			0	0	0
Transfer of alternative fuel from fuel delivery pipe into burner pipe to kiln.	262,800	Total Enclosure			0	0	0
Truck unloading into fuel hopper	262,800	Total Enclosure			0	0	0
Total					1.59	0.75	0.11

Methodology

Emission Factors based on AP-42 Section 13.2.4 as shown in Permit 093-21778-00002.

PM2.5 emissions calculated using ratio of "k" value for PM2.5/PM10.

Throughput assumed to be 10 ton/hr for all three kilns.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Scott Quaas
Lehigh Cement Co.
180 N Meridian Rd
Mitchell, IN 47446

DATE: February 4, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V - Administrative Amendment
093 - 32611 - 00002

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Bert Massengale, Plant Mgr
David Dempsey Trinity Consultants
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: February 4, 2013

RE: Lehigh Cement Co. / 093 - 32611 - 00002

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	LPOGOST 2/4/2013 Lehigh Cement Company LLC 093 - 32611 - 00002 final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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1		Scott Quaas Lehigh Cement Company LLC 180 N Meridian Rd Mitchell IN 47446 (Source CAATS) Via confirmed delivery										
2		Bert Massengale Plant Mgr Lehigh Cement Company LLC 180 N Meridian Rd Mitchell IN 47446 (RO CAATS)										
3		Lawrence County Board of Commissioners 916 15th Street Bedford IN 47421 (Local Official)										
4		Mr. Anthony Wray 1861 Buddha Bypass Rd Bedford IN 47421 (Affected Party)										
5		Mr. Bobby Minton 7745 S. Fairfax Rd Bloomington IN 47401 (Affected Party)										
6		Ms. Michelle M. Cohen Brown County Solid Waste District 121 Locust Lane Nashville IN 47448 (Affected Party)										
7		Mr. Danny Arnold 374 Cedar View Ln. Bedford IN 47421 (Affected Party)										
8		Mr. David Weatherholt Boilermaker Local #374 4777 East County Road 2100 North Dale IN 47523 (Affected Party)										
9		Mr. Don Sherry 1111 215 St. Tell City IN 47506-2815 (Affected Party)										
10		Mr. David Reed RR 1 Box 157 Jasonville IN 47438 (Affected Party)										
11		Mitchell City Council and Mayors Office 407 S. 6th St. Mitchell IN 47446 (Local Official)										
12		Ms. Tawana Shiflet 110 E Grissom Ave Mitchell IN 47446 (Affected Party)										
13		Lawrence County Health Department 2419 Mitchell Rd. Bedford, IN 47421 (Health Department)										
14		Mr. David Dempsey Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 (Consultant)										
15												

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