



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
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TO: Interested Parties / Applicant

DATE: March 7, 2012

RE: Lehigh Cement Company / 093-24556-00002

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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



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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

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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) Kiln #1 and 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 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.
- 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.

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(34), 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(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than 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(34).

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(34).

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(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 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(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(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(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.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(34).

Request for renewal shall be submitted to:

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

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

- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, 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(34).

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

B.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(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.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(34).

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ 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(34).

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

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

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

- (a) 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(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require 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(34).
- (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(34).

- (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(34).

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(34).

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 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(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 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(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(34). 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 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. 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(34).

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) Kiln #1 and 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 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.
- (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	kiln #1 alternative fuel delivery system	10	19.2
D.2.2(f)	F20	kiln #2 alternative fuel delivery system	10	19.2

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 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. 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(34).

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 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. 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(34).

SECTION D.4 FACILITY/EMISSION UNIT OPERATION CONDITIONS

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

- (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.

(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 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(34).

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(34).

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 compliance 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(34).

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.

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§ 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

Addendum to the
Technical Support Document for a
Part 70 Operating Permit Renewal

Source Name: Lehigh Cement Company LLC
Source Location: 180 North Meridian Road, Mitchell, IN 47446
County: Lawrence
SIC Code: 3241
Part 70 Operating Permit Renewal No.: T093-24556-00002
Permit Reviewer: Jenny Acker

Public Notice Information

On November 29, 2011, the Office of Air Quality (OAQ) had a notice published in the Times Mail in Bedford, Indiana, stating that Lehigh Cement Company LLC (Lehigh) had applied for a Part 70 Operating Permit Renewal of its Part 70 Operating Permit, issued on December 30, 2002. The notice also provided information on how the public could review the proposed permit (T093-24556-00002) and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

IDEM, OAQ Changes

Bolded language has been added, the ~~strikethrough~~ language has been deleted.

IDEM, Change 1:

On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section A - General Information, Section A - Emission Units and Pollution Control Equipment Summary, Section A - Specifically Regulated Insignificant Activities, Section B - Preventative Maintenance Plan, Section B - Emergency Provisions, Section B - Operational Flexibility, Section C - Risk Management Plan, the Facility Descriptions, and Section D - Preventative Maintenance Plan.

- A.1 General Information [326 IAC 2-7-4(c)] [~~326 IAC 2-7-5(15)~~ **(14)**] [326 IAC 2-7-1(22)]
-
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(~~15~~) **(14)**]
-
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-5(~~15~~) **(14)**]
-
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13) **(12)**] [~~326 IAC 2-7-6(1) and (6)~~] [326 IAC 1-6-3]
-

B.11 Emergency Provisions * * *

- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9)-(8) be revised in response to an emergency.

B.19 Operational Flexibility * * *

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

* * *

- (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), ~~or (e)~~. The Permittee shall make such records available, upon reasonable request, for public review.

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

C.13 Risk Management Plan [326 IAC 2-7-5(42) (11)] [40 CFR 68]

SECTION D.X FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(45) (14)]

* * *

D.1.X Preventive Maintenance Plan [326 IAC 2-7-5(43) (12)]

IDEM, Change 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. Also, the revisions resulted in changes to other rule sites listed in the permit. 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 * * *

* * *

- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in ~~326 IAC 2-2-1(ee)~~ **326 IAC 2-2-1(oo)** and/or ~~326 IAC 2-3-1(ii)~~ **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(ee)~~ **326 IAC 2-2-1(dd)** and/or ~~326 IAC 2-3-1(z)~~ **326 IAC 2-3-1(yy)**) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in

~~326 IAC 2-2-1(rr)~~**326 IAC 2-2-1(pp)** and/or ~~326 IAC 2-3-1(mm)~~**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(qq)~~**326 IAC 2-2-1(oo)** and/or ~~326 IAC 2-3-1(ll)~~**326 IAC 2-3-1(jj)**) at an existing emissions unit, document and maintain the following records:

* * *

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

* * *

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

* * *

- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in ~~326 IAC 2-2-1(qq)~~**326 IAC 2-2-1(oo)** and/or ~~326 IAC 2-3-1(ll)~~**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(ee)~~**326 IAC 2-2-1(dd)** and/or ~~326 IAC 2-3-1(z)~~**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(rr)~~**326 IAC 2-2-1(pp)** and/or ~~326 IAC 2-3-1(mm)~~**326 IAC 2-3-1(kk)**), the Permittee shall comply with following:

C.18 General Reporting Requirements * * *

* * *

- (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(qq)~~**326 IAC 2-2-1(oo)** and/or ~~326 IAC 2-3-1(ll)~~**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(xx)~~**326 IAC 2-2-1(ww)** and/or ~~326 IAC 2-3-1(qq)~~**326 IAC 2-3-1(pp)**, for that regulated NSR pollutant, and

IDEM, Change 3:

IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

C.17 General Record Keeping Requirements * * *

- (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.

IDEM, Change 4:

IDEM, OAQ has clarified the Permittee's responsibility under CAM.

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(34).

- (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.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:
- ~~(a)~~(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.
 - ~~(b)~~(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:
 - ~~(1)~~(A) initial inspection and evaluation;
 - ~~(2)~~(B) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - ~~(3)~~(C) any necessary follow-up actions to return operation to normal or usual manner of operation.
 - ~~(c)~~(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:
 - ~~(1)~~(A) monitoring results;
 - ~~(2)~~(B) review of operation and maintenance procedures and records; and/or
 - ~~(3)~~(C) inspection of the control device, associated capture system, and the process.
 - ~~(d)~~(4) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - ~~(e)~~(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.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(34). 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.

* * *

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".

* * *

IDEM, Change 5:

To be consistent with changes to Prevention of Significant Deterioration (PSD) Minor Limit Conditions D.1.1, D.2.1, D.3.1, D.4.1, and D.5.1, Condition D.6.1 - PSD Minor Limit is revised as follows:

D.6.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

* * *

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

IDEM, Change 6:

The CKD Silo, identified as EU48, is subject to the applicable requirements of 40 CFR Part 63, Subpart LLL, not just the transfer points. The applicability to the CKD Silo was properly identified in the Section E.1, which contains the applicable requirements of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry [40 CFR Part 63, Subpart LLL] and the Technical Support Document (TSD) of T089-24556-00002. Therefore, Condition A.2(n)(8) has been revised as follows:

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

* * *

(n) (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, ~~the conveyor transfer points associated with this facility are~~ **this is** considered an affected source.

IDEM, Change 7:

Condition D.3.1(a)(5) contains two (2) subsections labeled D.3.1(a)(5)(A). Therefore, Condition D.3.1(a)(5) has been revised as follows:

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

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

Comments from Lehigh Cement Company LLC

On December 28, 2011, Scott Quass, Environmental Manager of Lehigh Cement Company LLC, submitted comments on the proposed Part 70 Operating Permit Renewal No. T093-24556-00002.

A summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

Comment 1:

Revise the Table of Contents to be consistent with changes made as a result of the submitted comments.

IDEM, OAQ Response 1:

The Table of Contents has been revised as necessary and all conditions have been renumbered where appropriate.

Comment 2:

Delete the statements regarding the applicability of 40 CFR Part 63, Subpart LLL in Section A.2. Section E addresses the applicability of 40 CFR Part 63, Subpart LLL. Including 40 CFR Part 63, Subpart LLL applicability is duplicative and is not necessary, as evidenced by the fact that IDEM does not address the applicability of other regulations in the facility descriptions.

IDEM, OAQ Response 2:

It is standard language for IDEM to include the applicability of Parts 60/61/63 of 40 CFR in the A.2 and A.3 Sections. No change was made as a result of this comment.

Comment 3:

The citation "326 IAC 2-7-5(15)" in the headers for Conditions A.1, A.2, and A.3 should be replaced with "326 IAC 2-7-5(14)."

IDEM, OAQ Response 3:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 4:

If the 40 CFR Part 63, Subpart LLL applicability statements remain in the facility descriptions, revise Condition A.2(j)(3) as follows:

A.2 Emission Units and Pollution Control Equipment Summary * * *

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

- (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, ~~the conveyor transfer points associated with this facility are considered an~~ affected sources.

IDEM, OAQ Response 4:

The requested revision has been made.

Comment 5:

The CKD conveyor #1 and #2 are enclosed and as such do not emit particulate. Therefore, they are not subject to the requirements of 40 CFR Part 63, Subpart LLL. Revise Condition A.2(n)(7) and A.2(n)(9) as follows:

A.2 Emission Units and Pollution Control Equipment * * *

* * *

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

* * *

(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.~~

* * *

(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.~~

IDEM, OAQ Response 5:

40 CFR 63.1340(b) and (b)(7) states "the affected sources subject to this subpart are: "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." The subpart does not exclude totally enclosed conveyors from the requirements of 40 CFR Part 63, Subpart LLL. Furthermore, 40 CFR 63.1341 - Definitions, includes the following: "*Totally enclosed conveying system transfer point* means a conveying system transfer point that is enclosed on all sides, top, and bottom." No change has been made as a result of this comment.

Comment 6:

The citation "326 IAC 2-7-5(13)" in the header for Condition B.10 - Preventive Maintenance Plan should be replaced with "326 IAC 2-7-5(12)."

IDEM, OAQ Response 6:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 7:

Modify Condition B.10(d) to include that Lehigh's Operation and Maintenance Plan satisfies the PMP requirement of Condition B.10 as follows:

B.10 Preventive Maintenance Plan * * *

* * *

- (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** 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** for the affected sources.

IDEM, OAQ Response 7:

The requested change has been made.

Comment 8:

Pursuant to 326 IAC 2-7-16, the Permittee is required to notify the Commissioner of each emergency lasting one hour or more, not every regional office. Therefore, revised Condition B.11 - Emergency Provisions as follows:

B.11 Emergency Provisions * * *

* * *

- (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:

* * *

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Southwest 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~~

~~Southwest 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~~

and

~~IDEM Southwest Regional Office
1120 N. Vincennes Avenue
P.O. Box 128
Petersburg, Indiana 47567-0128~~

IDEM, OAQ Response 8:

At the time of Public Notice, the Regional Office that has jurisdiction over Lawrence County had not been determined and both the Southeast and Southwest Regional Offices were included in the Emergency Provisions. Since then, it has been determined that the source is under the jurisdiction of the Southeast Regional Office. Therefore, the requirement to report to the Southwest Regional is no longer necessary and the references to the Southwest Regional Office have been deleted. The commissioner requires that the notification required under 326 IAC 2-7-16, be submitted to the both the IDEM, OAQ, Compliance and Enforcement Branch, located in Indianapolis, Indiana and the IDEM Southeast Regional Office, located in Brownstown, Indiana.

Comment 9:

Pursuant to Condition B.12 - Permit Shield, the permit shield applies provided the applicable requirements are included and specifically identified in the permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. However, IDEM, OAQ has moved the nonapplicability statements out of the permit and into the Technical Support Document (TSD). Pursuant to Condition B.12, the nonapplicability statements need to be included in B.12 to effectuate the permit shield. Lehigh requests the nonapplicability statements be included in Condition B.12 - Permit Shield.

IDEM, OAQ Response 9:

Condition B.12 - Permit Shield has been revised as follows:

B.12 Permit Shield * * *

* * *

(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.**

~~(b)~~(c) * * *

~~(e)~~(d) * * *

~~(d)~~(e) * * *

~~(e)~~(f) * * *

~~(f)~~(g) * * *

~~(g)~~(h) * * *

Comment 10:

In the first paragraph of Condition B.16 - Permit Renewal, the citation "326 IAC 2-7-1(40)" should be replaced with "326 IAC 2-7-1(41)."

IDEM, OAQ Response 10:

The requested change has been made. The first paragraph of Condition B.16 has been revised as follows:

B.16 Permit Renewal * * *

- (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)** ~~326 IAC 2-7-1(40)~~. 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(34).

Comment 11:

Delete the three (3) references to "326 IAC 2-7-20(e)" in paragraph (a) of Condition B.19 - Operational Flexibility as the citation no longer exists.

IDEM, OAQ Response 11:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 12:

Pursuant to 326 IAC 1-1-6 and the existing permit language in Part 70 Operating Permit T093-5990-00002, Condition B.24 - Credible Evidence should be revised as follows:

B.24 Credible Evidence * * *

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any **emission limitation, standard, or rule in Title 326 of the Indiana Administrative Code** ~~condition of this permit~~, nothing in ~~this permit~~ **Title 326 of the Indiana Administrative Code** 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~~ **emission limitation, standard, or rule**, if the appropriate performance or compliance test or procedure had been performed.

IDEM, OAQ Response 12:

The proposed Condition B.24 is standard language and is consistent with the intent of the rule and the condition. No change has been made as a result of this comment.

Comment 13:

In the header of Condition C.13 - Risk Management Plan, the citation "326 IAC 2-7-5(12)" should be replaced with "326 IAC 2-7-5(11)."

IDEM, OAQ Response 13:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 14:

Condition C.14 - Response to Excursions or Exceedances as currently proposed extends the scope of the Compliance Response Plan (compliance monitoring parameter gap filling requirements) to every limitation contained in the permit by including "or exceedance of a limitation in this permit." This is unnecessary and is duplicative of existing reporting and record keeping requirements. Condition C.14 should only apply to an excursion or exceedance of a compliance monitoring range or indicator established for a Part 64 unit. The applicability provisions of the federal Compliance Assurance Monitoring Plan (CAM) Rule are contained in 40 CFR Part 64, 64.2 and the rule only applies to: (1) facilities that are subject to a limitation or standard for the applicable regulated air pollutant; (2) that meet a threshold (pre-control device) potential to emit; and (3) that utilize a control device to achieve compliance with the limitation or standard. Therefore, the definition of "Exceedance" at 40 CFR 64.1 "... a condition that is detected by monitoring that provides data in terms of an emission limit or standard..." must be interpreted to mean any Part 64 CAM monitoring, not all monitoring required in the Title V permit.

Furthermore, extending the applicability of this condition to exceedances of all limits is duplicative of Condition C.15 - Actions Related to Noncompliance Demonstrated by a Stack Test; Condition C.18 - General Reporting Requirements, paragraph (a) - Quarterly Deviation and Compliance Monitoring Report, requiring the reporting of deviations and response steps taken; Condition B.11 - Emergency Provisions, paragraph (b)(3) and 326 IAC 2-7-16(b)(3), (5), and (6), requiring reasonable response steps to minimize levels of emissions and reporting of corrective actions.

The federal CAM Rule recognizes the duplicity in its requirements and certain NESHAPs and that is why NESHAPs proposed after November 15, 1990 satisfy the monitoring requirements of 40 CFR Part 64. Not only does the Portland Cement NESHAP clearly set out the compliance monitoring necessary for affected units but it also requires "[a]t all times, including periods of startup, shutdown, and malfunction an owner or operator 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." Thus, Condition C.14 is duplicative of the NESHAP requirements.

Once a Permittee is in a non-compliance situation, the burden is clearly on the Permittee to come back into compliance to minimize and/or avoid enforcement. As proposed, Condition C.14 unilaterally creates additional enforcement counts for violation of a single permit limitation for failure to take reasonable response step and for failure to document same.

Lehigh requests that Condition C.14 - Response to Excursions or Exceedances be streamlined to remove duplicative regulation of exceedances of limits by deleting the portion of Condition C.14

which extends applicability to exceedances of permit limits. Condition C.14 should be revised as follows:

C.14 Response to Excursions or Exceedances * * *

Upon detecting an excursion **or exceedance from a specified CAM monitoring condition requiring** where a response step is required by the D in Section D or an exceedance of a limitation in this permit:

IDEM, OAQ Response 14:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 15:

Update the following citations in Conditions C.17 - General Record Keeping Requirements and C.18 - General Reporting Requirements as follows:

326 IAC 2-2-1(qq) should be updated to 326 IAC 2-2-1(oo)
326 IAC 2-3-1(ll) should be updated to 326 IAC 2-3-1(jj)
326 IAC 2-2-1(ee) should be updated to 326 IAC 2-2-1(dd)
326 IAC 2-3-1(z) should be updated to 326 IAC 2-3-1(y)
326 IAC 2-2-1(rr) should be updated to 326 IAC 2-2-1(pp)
326 IAC 2-3-1(mm) should be updated to 326 IAC 2-3-1(kk)
326 IAC 2-2-1(xx) should be updated to 326 IAC 2-2-1(ww)
326 IAC 2-3-1(qq) should be updated to 326 IAC 2-3-1(pp)

IDEM, OAQ Response 15:

The requested change has been addressed in the "IDEM, OAQ Changes" section of this document.

Comment 16:

The reference to rendering the requirements of PSD not applicable in paragraphs (a), (b), and (c) of Condition D.1.1 - Prevention of Significant Deterioration (PSD) Minor Limits is duplicative of language in the conclusion of the Condition. Therefore, Lehigh requests this language be deleted in order to streamline the condition. Additionally, Lehigh requests the following change to the last paragraph of the condition.

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

* * *

Compliance with these limits **shall limit** will ensure that the PM and PM₁₀ emissions increase from each of the above-referenced modifications, **to shall be** less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore,~~ **and shall render** the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

IDEM, OAQ Response 16:

There are multiple D sections in the permit containing limits issued as Part of Significant Source Modification 093-15822-00002 (issued June 24, 2003) and Significant Source Modification 093-19158-00002 (issued November 5, 2004). Therefore, compliance with the limits in a specific D Section does not necessarily limit the emissions increase from the referenced modifications to

less than twenty-five (25) and fifteen (15) tons per year, respectively. Condition D.1.1 has been revised as follows:

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

(a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and T093-5990-00002, issued on December 30, 2002, ~~and in order to render the requirements of PSD not applicable~~, the following conditions shall apply:

* * *

(b) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable~~, the following conditions shall apply:

* * *

(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), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable~~, the PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

* * *

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** ~~will ensure that~~ the PM and PM₁₀ emissions increase from each of the above-referenced modifications, ~~to shall be~~ less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore,~~ **and shall render** the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

Comment 17:

Lehigh requests the reference to the Section C Recordkeeping Requirements be moved from a labeled subsection to the beginning of the D Section record keeping requirements. Keeping the requirement as a labeled subsection requires Lehigh to either certify compliance with Condition C.17 - General Record Keeping Requirements again or to state that the labeled subsection "does not contain an applicable requirement". Therefore, Lehigh requests the following revision:

D.X.X Record Keeping Requirements

Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

* * *

~~(x) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.~~

IDEM, OAQ Response 17:

IDEM, OAQ disagrees. Lehigh is required to certify compliance with the applicable requirements in a condition, in entirety, or report any deviations. The statement "Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition" is informative in nature and not an applicable requirement. No change has been made as a result of this comment.

Comment 18:

In order to be consistent with the D Section - Visible Emission Notation conditions, Lehigh requests the following changes:

D.X.X Record Keeping Requirements

* * *

- (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 **normal daylight operations hours** that day).

IDEM, OAQ Response 18:

The proposed permit contains standard language for this condition. If a notation is not taken, some type of record must be taken noting why a notation was not taken. The source may use the requested language "the process did not operate during normal daylight operations" as part of its record for that day. No change was made as a result of this comment.

Comment 19:

The reference to rendering the requirements of PSD not applicable in paragraphs (a) and (b) of Condition D.2.1 - Prevention of Significant Deterioration (PSD) Minor Limits is duplicative of language in the conclusion of the Condition. Therefore, Lehigh requests this language be deleted in order to streamline the condition. Additionally, Lehigh request the following change to the last paragraph of the condition.

D.2.1 Prevention of Significant Deterioration (PSD) **Minor Limits** * * *

* * *

Compliance with these limits ~~shall limit will ensure that~~ the PM and PM₁₀ emissions increase from each of the above-referenced modifications, ~~to shall be~~ less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore, and shall render~~ the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

IDEM, OAQ Response 19:

There are multiple D sections in the permit containing limits issued as Part of Significant Source Modification 093-15822-00002 (issued June 24, 2003) and Significant Source Modification 093-19158-00002 (issued November 5, 2004). Therefore, compliance with the limits in a specific D Section does not necessarily limit the emissions increase from the referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively. Condition D.2.1 has been revised as follows:

D.2.1 Prevention of Significant Deterioration (PSD) **Minor Limits** * * *

- (a) Pursuant to Significant Source Modification 093-15822-00002 (issued June 24, 2003), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this modification,~~ the following conditions shall apply:

* * *

- (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), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this modification,~~ the following conditions shall apply:

* * *

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** ~~will ensure that~~ the PM and PM₁₀ emissions increase from each of the above-referenced modifications, **to shall be** less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore,~~ **and shall render** the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

Comment 20:

Consistent with the existing permit Conditions D.2.12(d) and D.3.11(d), and so as not to create duplicative monitoring and reporting conditions, Lehigh requests the following revisions.

D.2.7 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) * * *

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. **On days that the NESHAP monitoring required by 40 CFR Part 63, Subpart LLL is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.**

D.3.6 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) * * *

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), articulolader (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. **On days that the NESHAP monitoring required by 40 CFR Part 63, Subpart LLL is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.**

IDEM, OAQ Response 20:

If the NESHAP monitoring meets the requirements of Conditions D.2.7 - Visible Emission Notations and D.3.6 - Visible Emission Notations, then the source may use the NESHAP monitoring and note this in the daily record. No change was made as a result of this comment.

Comment 21:

The reference to rendering the requirements of PSD not applicable in paragraphs (a) and (b) of Condition D.3.1 - Prevention of Significant Deterioration (PSD) Minor Limits is duplicative of language in the conclusion of the Condition. Therefore, Lehigh requests this language be deleted in order to streamline the condition. Additionally, Lehigh requests the following change to the last paragraph of the condition.

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

* * *

Compliance with these limits ~~shall limit will ensure that~~ the PM and PM₁₀ emissions increase from each of the above-referenced modifications, ~~to shall be~~ less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore,~~ **and shall render** the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

IDEM, OAQ Response 21:

There are multiple D sections in the permit containing limits issued as Part of Significant Source Modification 093-15822-00002 (issued June 24, 2003) and Significant Source Modification 093-19158-00002 (issued November 5, 2004). Therefore, compliance with the limits in a specific D Section does not necessarily limit the emissions increase from the referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively. Condition D.3.1 has been revised as follows:

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

(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), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable,~~ the following conditions shall apply:

* * *

(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), ~~in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable,~~ the PM and PM₁₀ emissions from the facilities listed in the following table shall not exceed the listed emission limits.

* * *

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 will ensure that~~ the PM and PM₁₀ emissions increase from each of the above-referenced modifications, ~~to shall be~~ less than twenty-five (25) and fifteen (15) tons per year, respectively. ~~Therefore,~~ **and shall render** the requirements of 326 IAC 2-2 (PSD) ~~are rendered~~ not applicable to these modifications.

Comment 22:

The reference to rendering the requirements of PSD not applicable in the first paragraph of Condition D.4.1 - Prevention of Significant Deterioration (PSD) Minor Limits is duplicative of language in the conclusion of the condition. Therefore, Lehigh requests this language be deleted

in order to streamline the condition. Additionally, Lehigh requests the following change to the last paragraph of the condition.

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

* * *

Compliance with these limits, ~~shall limit will ensure that~~ the emissions increase from the preheater modification ~~to shall be~~ less than **twenty-five (25) and fifteen (15) tons per year, respectively the PSD significant thresholds. Therefore, ~~and shall render~~ the requirements of 326 IAC 2-2 (PSD) ~~are~~ not applicable to the preheater modification.**

IDEM, OAQ Response 22:

There are multiple D sections in the permit containing limits issued as Part of Significant Source Modification 093-15822-00002 (issued June 24, 2003) and Significant Source Modification 093-19158-00002 (issued November 5, 2004). Therefore, compliance with the limits in a specific D Section does not necessarily limit the emissions increase from the referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively.

Compliance with the limits shall limit the emissions increase of the preheater modification to below the following significant thresholds for the associated pollutants;

The PSD significant threshold for PM is 25 tons per year
The PSD significant threshold for PM₁₀ is 15 tons per year
The PSD significant threshold for NO_x is 40 tons per year
The PSD significant threshold for CO is 100 tons per year
The PSD significant threshold for VOC is 40 tons per year
The PSD significant threshold for Lead is 0.6 tons per year
The PSD significant threshold for Sulfuric Acid Mist is 7 tons per year
The PSD significant threshold for H₂S is 10 tons per year

Therefore, the language "the PSD Significant thresholds" is appropriate and will not be deleted, and the language "twenty-five (25) and fifteen (15) tons per year" also will not be inserted.

Additionally, to clarify what limits in the D Sections of this permit are related, the reference to Significant Permit Modification 093-16851-00002 has changed to Significant Source Modification (093-15822-00002, issued June 24, 2003), which was issued in conjunction with SPM 093-16851-00002.

Condition D.4.1 has been revised as follows:

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

Pursuant to Significant ~~Permit Source~~ Modification ~~093-16851-00002 (issued July 11, 2003)~~ **093-15822-00002 (issued June 24, 2003)**, in order to render the requirement of 326 IAC 2-2 (~~Prevention of Significant Deterioration (PSD))~~ not applicable to the preheater modification, the following conditions shall apply:

* * *

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

Comment 23:

The authority cited for Condition D.4.2 - Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1] should be "326 IAC 7-1.1" instead of "326 IAC 7-1.1-1"

IDEM, OAQ Response 23:

The requested change has been made. The Condition D.4.2 header has been revised as follows:

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

Comment 24:

Lehigh requests the following revisions to Condition D.4.3 - NO_x Emissions:

D.4.3 NO_x Emissions * * *

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

IDEM, OAQ Response 24:

The requested change has been made.

Comment 25:

To be consistent with the existing permit, revise Condition D.4.6 as follows.

D.4.6 Particulate Control

In order to **demonstrate compliance** ~~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.**

IDEM, OAQ Response 25:

This condition does not demonstrate compliance. Operation of the ESPs is required in order for the associated kilns to comply with limitations. Condition D.4.6 has been revised as follows:

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.**

Comment 26:

Delete Condition D.4.7 - Sulfur Dioxide Control. The water spray towers were installed to meet the kiln D/F standards in 40 CFR Part 63, Subpart LLL. The spray towers are not required to meet the SO₂ limits in Condition D.4.1 - Prevention of Significant Deterioration (PSD) Minor Limits and operation of same was not a PSD requirement included in the pre-heater modification permitting action.

IDEM, OAQ Response 26:

SSM 093-15822-00002 (issued June 24, 2003) and SPM 093-16851-00002 (issued July 11, 2003) authorized the pre-heater modification. That the spray towers provided partial SO₂ control was identified during the public notice period and addressed in the ATSD. However, the required compliance determination requirement was overlooked. Additionally, Condition D.4.5 - Compliance Assurance Monitoring (CAM) Plan was added to the Part 70 Operating permit as part of the SSM 093-15822-00002 permitting action and stated "IDEM has determined that a Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the one-stage preheater kiln #1 (EU15), and the one-stage preheater kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control." This clearly documents that the spray towers are considered control devices for SO₂.

Furthermore, the spray towers were in operation and provided partial SO₂ control during stack testing. Therefore, Condition D.4.7 is required to ensure that the SO₂ emission rate, as tested, is met at all times. The source may submit a permit application requesting the option to demonstrate compliance with the SO₂ emission limitation without the spray towers in operation. If compliance is demonstrated, Condition D.4.7 can be removed.

No change was made as a result of this comment.

Comment 27:

In Condition D.4.8 - Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content, to be consistent with the existing permit and 326 IAC 7-2-1(f) include "Appendix A, Methods 6, 6A, 6C, or 8" after "40 CFR 60, D.4.8(b) as follows:

D.4.8 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content * * *

* * *

- (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.**

IDEM, OAQ Response 27:

The requested change has been made.

Comment 28:

The following change is requested:

D.4.11 Compliance Assurance Monitoring (CAM) Plan * * *

- (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 for ~~PM and PM₁₀~~ 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.

IDEM, OAQ Response 28:

The requested change has been made.

Comment 29:

The following change is requested:

D.4.11 Compliance Assurance Monitoring (CAM) Plan * * *

* * *

- (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 **dioxin/furan ESP inlet temperature** monitoring requirements ~~for dioxin/furan~~ 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.

IDEM, OAQ Response 29:

The condition has been revised as follows:

D.4.11 Compliance Assurance Monitoring (CAM) Plan * * *

* * *

- (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 ~~for dioxin/furan~~ 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.

Comment 30:

In Condition D.4.13 - Reporting Requirements, Lehigh requests the reference to the Section C Reporting Requirements be moved from a labeled subsection to the beginning of the D condition. Keeping the requirement as a labeled subsection requires Lehigh to either certify compliance with Condition C.18 - General Reporting Requirements again or to state that the label subsection "does not contain an applicable requirement". Therefore, Lehigh requests the following revisions:

D.4.13 Reporting Requirements

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(34).

* * *

- ~~(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(34).~~

IDEM, OAQ Response 30:

IDEM, OAQ disagrees. Lehigh is required to certify compliance with the applicable requirements in a condition, in entirety, or report any deviations. The statement "Section C - General Reporting Requirements, of this permit contains the Permittee's obligation with regard to the reporting

required by this condition" is informative in nature and not an applicable requirement. No change has been made as a result of this comment.

Comment 31:

Delete "Beginning June 14, 2002" from the beginning of Condition D.4.13(b). Additionally, update "326 IAC 3-5-7(5)" with "326 IAC 3-5-7(c)(4)."

IDEM, OAQ Response 31:

The requested changes have been made. Condition D.4.13 (b) has been revised as follows:

D.4.13 Reporting Requirements

* * *

- (b) ~~Beginning June 14, 2002, 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.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(5)~~ **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.

Comment 32:

The reference to rendering the requirements of PSD not applicable in the first paragraph of Condition D.5.1 - Prevention of Significant Deterioration (PSD) Minor Limits is duplicative of language in the conclusion of the Condition. Therefore, Lehigh requests this language be deleted in order to streamline the condition. Additionally, Lehigh requests the following change to the last paragraph of the condition.

D.5.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

Pursuant to Significant Permit Modification 093-16851-00002 (issued July 11, 2003), ~~in order to render the requirement of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the Kiln preheater modification,~~ 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 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 ~~Therefore~~ the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

IDEM, OAQ Response 32:

There are multiple D sections in the permit containing limits issued as Part of Significant Source Modification 093-15822-00002 (issued June 24, 2003) and Significant Source Modification 093-19158-00002 (issued November 5, 2004). Therefore, compliance with the limits in a specific D Section does not necessarily limit the emissions increase from the referenced modifications to less than twenty-five (25) and fifteen (15) tons per year, respectively.

Additionally to clarify what limits in the D Sections of this permit are related, the reference to Significant Permit Modification 093-16851-00002 has changed to Significant Source Modification (093-15822-00002, issued June 24, 2003), which was issued in conjunction with SPM 093-16851-00002.

Condition D.5.1 has been revised as follows:

D.5.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

Pursuant to Significant ~~Permit-Source~~ Modification ~~093-16851-00002 (issued July 11, 2003)~~ **093-15822-00002 (issued June 24, 2003)**, in order to render the requirement of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the Kiln preheater modification, 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 Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

Comment 33:

Revise Conditions D.5.8 - Compliance Assurance Monitoring (CAM) Plan as follows:

D.5.8 Compliance Assurance Monitoring (CAM) Plan * * *

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 for ~~PM and PM₁₀~~ 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.

IDEM, OAQ Response 33:

The requested change has been made.

Comment 34:

In Condition D.5.10 - Reporting Requirements, Lehigh requests the reference to the Section C Reporting Requirements be moved from a labeled subsection to the beginning of the D condition. Keeping the requirement as a labeled subsection requires Lehigh to either certify compliance with Condition C.18 - General Reporting Requirements again or to state that the label subsection "does not contain an applicable requirement." Also, replace the reference to "326 IAC 3-5-7(5)" with "326 IAC 3-5-7(c)(4)." Therefore, Lehigh requests the following revisions:

D.5.10 Reporting Requirements

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(34).

- (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(5)~~ **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(34).~~

IDEM, OAQ Response 34:

IDEM, OAQ disagrees. Lehigh is required to certify compliance with the applicable requirements in a condition, in entirety, or report any deviations. The statement "Section C - General Reporting Requirements, of this permit contains the Permittee's obligation with regard to the reporting required by this condition" is informative in nature and not an applicable requirement.

Condition D.5.10 has been revised as follows:

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(5)~~ **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(34).

Comment 35:

As proposed by IDEM, OAQ in 2005 and agreed to again during the settlement conference in June 2011 and consistent with Lehigh and the IDEM February 1, 2005 Joint Stipulation of Stay of Effectiveness, include the following in Condition D.6.2 - Particulate "Compliance with these conditions may be determined by a calculation using AP-42 emission factors." This is necessary for compliance certification purposes since most of the units included in Condition D.6.2 are fugitive sources. Additionally, streamline this condition by removing duplicative equation information. Revise Condition D.6.2 as follows:

D.6.2 Particulate * * *

- (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:~~

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and
P = 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), 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.

~~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:~~

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour~~

Compliance with these conditions may be determined by a calculation using AP-42 emission factors.

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:

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

IDEM, OAQ Response 35:

The Permittee may certify compliance with these limitations through calculations which utilize AP-42 emission factors, the pound of PM per ton of material throughput limits included in Condition D.6.1 - PSD Minor Limit, or through other methods approved by the Commissioner. Condition D.6.2 has been revised as follows:

D.6.2 Particulate * * *

(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:~~

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and
P = 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), 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~~ **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:

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

Comment 36:

Delete Condition D.6.3 - Particulate Control as it is duplicative of Condition D.3.5, which requires the operation of baghouse RMDC5 at all times when its associated facility/emissions unit is in operation. Keeping this reference will require Lehigh to either certify compliance with Condition D.3.5 a second time or to include "does not contain an applicable requirement" in every compliance certification.

IDEM, OAQ Response 36:

Condition D.6.3 - Particulate Control has been removed from the permit as follows:

Compliance Determination Requirements

D.6.3 Particulate Control

~~Condition D.3.5 - Particulate Control, of this permit contains the Permittee's obligation with regard to the operation of the baghouse identified as RMDC5.~~

Comment 37:

Consistent with IDEM's NESHAP and NSPS Incorporation Guidance and other permits recently issued by IDEM, remove the portions of 40 CFR Part 63, Subpart LLL in Attachment A that are not applicable to Lehigh. As stated in the guidance (referencing verbatim): "The non-applicable parts are not copied into the condition." For clarification, revise the Condition E.1.2 - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry as follows:

E.1.2 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry * * *

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 ~~listed~~ facilities **listed in Section E.1**, as specified as follows:

IDEM, OAQ Response 37:

IDEM, OAQ references the applicable requirements of a NESHAP or NSPS in a Section E condition and includes the NESHAP or NSPS in its entirety as an attachment to the permit. Nonapplicable requirements are not referenced in the Section E condition.

No change has been made to Attachment A (40 CFR Part 63, Subpart LLL) of the permit as a result of this comment.

Condition E.1.2 has been revised as requested.

Comment 38:

Consistent with IDEM's NESHAP and NSPS Incorporation Guidance and other permits recently issued by IDEM, remove the portions of 40 CFR Part 63, Subpart LLL in Attachment B that are not applicable to Lehigh. As stated in the guidance (referencing verbatim): "The non-applicable parts are not copied into the condition." For clarification, revise the Condition E.1.3 - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry as follows:

E.1.3 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry * * *

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~~ **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:

IDEM, OAQ Response 38:

It is the current policy of the IDEM, OAQ to reference the applicable requirements of a NESHAP or NSPS in a Section E condition and include the NESHAP or NSPS in its entirety as an attachment to the permit. Nonapplicable requirements are not referenced in the Section E condition.

No change has been made to Attachment B (40 CFR Part 63, Subpart LLL) of the permit as a result of this comment.

Condition E.1.3 has been revised as requested.

Comment 39:

Condition E.1.3(r) should cite "(b)" in addition to "(a) and (c)".

IDEM, OAQ Response 39:

Condition E.1.3(r) has been revised as follows:

E.1.3 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry * * *

* * *

(r) 40 CFR 63.1351 (a), **(b)**, and (c)

Comment 40:

Attachments A and B to the permit are both missing the initial Federal Register citation for the Portland Cement NESHAP. Please make the following revisions:

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)]

* * *

And

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)]

* * *

IDEM, OAQ Response 40:

The requested changes have been made.

Comment 41:

Include at the end of the Emergency Occurrence Form "A certification is not required for this report."

IDEM, OAQ Response 41:

IDEM, OAQ removed the last sentence dealing with the need for certification, or lack thereof, from the form because the condition requiring the form already addresses this issue.

No change has been made as a result of this comment.

Comment 42:

Include at the end of the Quarterly Report and Deviation Forms "Attach a signed certification to complete this report."

IDEM, OAQ Response 42:

IDEM, OAQ removed the last sentence dealing with the need for certification, or lack thereof, from the form because the Condition requiring the form already addresses this issue.

No change has been made as a result of this comment.

Amendments to the Technical Support Document (TSD)

In addition to the above comments, Scott Quass, submitted comments specific to the Technical Support Document (TSD) of this action.

IDEM does not amend the Technical Support Document (TSD) because the technical support material is maintained to document the original review that was placed on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

A summary of the comments and IDEM, OAQ responses (**bolded** language has been added, the ~~strike~~through language has been deleted) is as follows:

TSD Comment 1:

In the Source Description and Location Section, consistent with the certified mail receipt provided to IDEM on October 6, 2011, correct the date that IDEM, OAQ received the application as follows:

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Lehigh Cement Company LLC relating to the operation of a stationary portland cement

manufacturing plant. On ~~March 30, 2007~~ ~~April 2, 2007~~, Lehigh Cement Company LLC submitted an application to the OAQ requesting to renew its operating permit. Lehigh Cement Company LLC was issued its first Part 70 Operating Permit (T093-5990-00002) on December 30, 2002.

Response to TSD Comment No. 1:

IDEM, OAQ stamps and logs applications on the date they are received by IDEM, OAQ from the State of Indiana mail room. The above information is correct as the IDEM, OAQ received the application on April 2, 2007. However, as supported by the certified mail receipt, the State of Indiana mail room received the application on March 30, 2007.

TSD Comment 2:

The list of Insignificant Activities included in the permit only partially reflects the listed Insignificant and Trivial Activities listed in the TSD. Is it necessary to list all the Insignificant and Trivial Activities in the TSD? Can the TSD cite to the applicable rule?

Response to TSD Comment No. 2:

Only the Insignificant and/or Trivial Activities which have applicable requirements are listed in the permit. The TSD lists all Insignificant and Trivial Activities as submitted as part of the application to this permitting action.

TSD Comment 3:

This is a permit renewal, not a modification. Therefore, under the County Attainment Status Section of the TSD, make the following change:

The source is located in Lawrence County.

* * *

- 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} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.~~

Response to TSD Comment No. 3:

For the purposes of determining the source status with regards to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) it is necessary to review direct PM_{2.5} and SO₂ with regard to the requirements of 326 IAC 2-2 (PSD). The above statement is correct.

TSD Comment 4:

The Actual Emissions Section reflects the 2007 OAQ emission data. This table should reflect the 2009 OAQ emission data.

Response to TSD Comment No. 4:

IDEM, OAQ concurs that the 2009 OAQ emission data is available.

TSD Comment 5:

In order to establish the link between SO₂ and the water spray tower utilized to meet the dioxin/furan ESP inlet temperature, the Federal Rule Applicability Section - CAM should read as follows:

CAM

* * *

(b) SO₂

* * *

- (1) As part of the Significant Source Modification No: 093-15822-00002 and Significant Permit Modification No: 093-16851-00002 permitting actions, the OAQ made the following determination.

A SO₂ Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the kiln #1 (EU15) and kiln #2 (EU16).

Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control and the source is subject to emission limitations for SO₂ [326 IAC 2-2 and 326 IAC 7-1.1-1]. Kilns #1 and #2 are each equipped with a spray tower which aids in the reduction of SO₂ emissions and are also used to prevent the formation of dioxin and furan emissions from the kilns. The dioxin and furan emissions are regulated under Subpart LLL. Compliance with the EU15 and EU16 **ESP inlet temperature** monitoring requirements for dioxin/furan of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64 for SO₂.

Response to TSD Comment No. 5:

Under 40 CFR Part 63, Subpart LLL, the kilns are subject to monitoring requirements pertaining to the inlet temperature to the particulate matter control device (PMCD). Therefore, it is not necessary to specify "ESP inlet temperature" with regards to this CAM applicability determination.

TSD Comment 6:

Under the Federal Rule Applicability Section for the NSPS 40 CFR Part 60, Subpart F applicability, the following revision should be made:

NSPS

40 CFR 60, Subpart F

* * *

- **Conveyor system transfer points associated with the ~~One~~(4) main belt #1**, identified as F17, approved for construction in 2004.

Response to TSD Comment No. 6:

IDEM, OAQ agrees that the conveyor system transfer points are the affected sources, not the belt itself.

TSD Comment 7:

Under the Federal Rule Applicability Section for the NSPS 40 CFR Part 60, Subpart OOO applicability paragraph (c), all the calcium sulfate material emission units are exempt from 40 CFR Part 60, Subpart OOO pursuant to 40 CFR 60.670.

Pursuant to 40 CFR 60.670(b), "An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart."

This exemption is consistent with U.S. EPA's long held interpretation that the nonmetallic mineral processing plant ends after the secondary crusher conveyor and 40 CFR Part 60, Subpart F begins with the raw material storage. Thus, it is inconsistent/illogical to argue that the calcium sulfate material emission units are affected units under 40 CFR Part 60, Subpart OOO.

The following revision to the Federal Rule Applicability Section is requested:

NSPS

* * *

40 CFR 60, Subpart OOO

* * *

- (c) ~~The following facilities are considered affected sources under the New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO), that commenced construction, reconstruction, or modification after the applicability date of August 31, 1983.~~

Pursuant to 40 CFR 60.670(b), the following facilities that commenced construction, reconstruction, or modification after the applicability date of August 31, 1983 are exempt from the New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR Part 60, Subpart OOO) because they follow in the plant process a facility subject to the provisions of Subpart F.

- ~~One (1) synthetic gypsum hopper, identified as F11, approved for construction in 2004.~~
- ~~One (1) synthetic gypsum weight belt, identified as F15, approved for construction in 2004.~~
- ~~One (1) raw material hopper, identified as F13, approved for construction in 2004.~~
- ~~One (1) raw material weight belt, identified as F16, approved for construction in 2004.~~
- ~~One (1) main belt #1, identified as F17, approved for construction in 2004.~~
- ~~One (1) enclosed pugmill, identified as EU49, approved for construction in 2004.~~
- ~~One (1) main belt #2, identified as F18, approved for construction in 2004.~~

- (1) ~~However, pursuant to 40 CFR 63.1356(a) [64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006], until September 9, 2013, the facilities are exempt from 40 CFR Part 60, Subpart OOO because they are subject to 40 CFR Part 63, Subpart LLL.~~

- (2) ~~On and after September 9, 2013, pursuant to 40 CFR 63.1356 Sources with Multiple Emission Limits or Monitoring Requirements [75 FR 55064, Sept. 9, 2010]: if an affected facility subject to this subpart (40 CFR Part 63, Subpart LLL) has a different emission limit or requirement for the same pollutant under another~~

~~regulation in Title 40 of this chapter (Chapter I), the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.~~

The affected sources are subject to the following requirements:

Requirement	40 CFR 60, Subpart OOO	*40 CFR 63, Subpart LLL
Opacity	not to exceed 10%	not to exceed 10%
Performance Testing	initial & once every 5 yrs using Method 9	monthly using Method 22 upon completing 6 consecutive monthly tests with no visible emissions observed, the source may decrease testing to semi-annual upon observation during a semi-annual test, the source shall resume monthly testing

* National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL), ~~that became effective on November 8, 2010~~, 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).

~~Although the opacity limitation is the same under both regulations, the frequency of the performance testing is more stringent under 40 CFR 63, Subpart LLL. Therefore, the facilities shall comply with the requirements of 40 CFR 63, Subpart LLL and are exempt from the requirements of 40 CFR 60, Subpart OOO.~~

Response to TSD Comment No. 7:

Under the Federal Rule Applicability Section of the TSD, the analysis of the applicability of NSPS 40 CFR Part 60, Subpart F, concluded that none of the affected facilities under the NSPS, Subpart F are subject to the requirements of NSPS, Subpart F. Additionally, the analysis concludes by stating, "the requirements of the New Source Performance Standard (NSPS) for Portland Cement Plants are not included in this permit." No change has been made as a result of this comment.

TSD Comment 8:

Under the State Rule Applicability Section - 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), it is not necessary to repeat the analysis which IDEM went through in establishing Lehigh's existing PSD limits established after the issuance of Lehigh's Initial Title V permit. Trying to recreate the analysis for each in the Title V Renewal TSD could become problematic if it differs from that previously issued. Moreover, mistakes exist in the tables regarding the potentials to emit which creates new issues for past modifications.

Response to TSD Comment No. 8:

The TSD for the Part 70 Operating Permit Renewal serves as a summary of the permitting actions that occurred after issuance of the Part 70 Operating Permit. The information contained in the tables accurately reflects the limits derived through the various permitting actions. Therefore, it is appropriate to include this information.

TSD Comment 9:

Consistent with Lehigh's appeal of its Significant Source Modification No. 093-19158-00002 (issued November 5, 2004) and Significant Permit Modification No. 093-18649-00002 (issued November 5, 2004) (pending with the Indiana Office of Environmental Adjudication), the following table should not include emissions from the existing CKD Silo (EU48). IDEM relies on these calculations for future PSD determinations regarding modifications; and, although IDEM accurately determined that Lehigh's modification does not trigger PSD, the calculations in the TSD include both the potential to emit from the existing CKD Silo and the past actual emissions of the existing CKD Silo (EU48) (expressed through the emissions of the blending bins). Thus potential emission for this unit are double-counted. The CKD Silo emissions should be removed from first table under the State Rule Applicability Section - 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) analysis for SSM 093-19158-00002 and SPM 093-18649-00002 and the totals should be updated accordingly.

Response to TSD Comment No. 9:

IDEM, OAQ concurs. The calculations supporting SSM 093-19158-00002 and SPM 093-18649-00002 include PM and PM10 emissions from uncontrolled material dropping to the CKD Silo (EU48) and do not specify the drop point as enclosed. This calculation was the basis for the 0.0121 pound of PM per ton of material throughput and 0.0057 pound of PM10 per ton of material throughput limits applicable to the CKD Silo and the referenced as the double-counted emissions.

A review of the application submitted for SSM 093-19158-00002 and SPM 093-18649-00002 document all transfer points associated with the CKD Silo as enclosed and the particulate emissions venting to an existing baghouse, identified as baghouse RMDC5. This has been verified by the source and the source inspector.

Baghouse RMDC5 also controls particulate emissions from the blending bins (EU13) and is subject to a PM and PM10 limit based on the manufacturers specified grain loading and air flow at 8,760 hours per year of operation. Therefore, the emissions from the particulate emissions from material handling at the CKD Silo (EU48) are included in the baghouse RMDC5 limits. The analysis, related to SSM 093-19158-00002 and SPM 093-18649-00002, should reflect the following revisions:

The potential to emit of the one (1) proposed calcium sulfate material facility is limited in this proposed approval by limiting the material input of each process and the emissions from the process as follows:

Emission Unit	Material Input Limit (tons/12 months)	PM Emission Limitation (lbs/ton)	PM ₁₀ Emission Limitation (lbs/ton)	Equivalent PM PTE (tons/yr)	Equivalent PM ₁₀ PTE (tons/yr)
Synthetic Gypsum and Raw Materials Storage Piles (F10 and F12)	50,000	0.0121	0.0057	0.30	0.14
Synthetic Gypsum Hopper (F11)	35,000	0.0121	0.0057	0.21	0.10
Synthetic Gypsum Weight Belt (F15)	35,000	0.0121	0.0057	0.21	0.10
Raw Material Hopper (F13)	15,000	0.0121	0.0057	0.09	0.04

Raw Material Weight Belt (F16)	15,000	0.0121	0.0057	0.09	0.04
Main Belt #1 (F17)	50,000	0.0121	0.0057	0.30	0.14
* CKD silo (EU48)	35,000	0.0121	0.0057	0.21	0.10
Pugmill (EU49)	85,000	0.0121	0.0057	0.51	0.24
Main Belt #2 (F18)	85,000	0.0121	0.0057	0.51	0.24
Outdoor calcium sulfate material storage pile (F14)	85,000	0.0121	0.0057	0.51	0.24
Storage Building (resulting from previous limits)	85,000	0.0121	0.0057	0.51	0.24
Pile Movement (resulting from previous limits)	85,000	0.0121	0.0057	0.51	0.24
Storage	-	-	-	0.02	0.02
Totals:				4.01 3.80	1.91 1.81

* All transfer points associated with CKD Silo (EU48) are enclosed and particulate emissions from the CKD Silo (EU48) are vented to an existing baghouse, identified as baghouse RMDC5. Since the PTE from baghouse RMDC5 is already limited and the limit will not increase as a result as this modification, there is no increase in PM and PM10 from the CKD Silo.

The total of the changes permitted in SPM 093-16851-00002 (issued July 11, 2033) including the proposed revised limits and the new calcium sulfate facilities are as follows:

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	Lead
Future Potential Emissions from Preheater Kilns 1 & 2	90.1	189.9	2417.4	97.9	537.5	3587.1	0.545
+ Potential Emissions Upstream and Downstream of Preheater Kilns	275.9	275.9	-	-	-	-	-
+ Potential Fugitive Emissions Upstream and Downstream Of Preheater Kilns	204.96	133.3	-	-	-	-	-
+ Potential to Emit from calcium sulfate material facility	4.01 3.80	1.91 1.81	-	-	-	-	-
+ Potential Emissions from Raw Mill Natural Gas Furnace	^	^	0.0	0.5	6.9	8.2	0.000
- Past Actual Emissions From Long - Dry Kilns 1 & 2	80.3	195.0	2345.0	62.0	447.4	3545.0	0.005

The total of the changes permitted in SPM 093-16851-00002 (issued July 11, 2033) including the proposed revised limits and the new calcium sulfate facilities are as follows:

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	Lead
- Past Actual Emissions Upstream and Downstream of Kilns	265.8	265.8	-	-	-	-	-
- Past Actual Fugitive Emissions Upstream and Downstream of Kilns	205.86	129.26	-	-	-	-	-
- Past Actual Emissions from Raw Mill Coal Stoker	^^	^^	36.5	0.0	1.8	8.1	
- Past Actual Emissions from Raw Mill Natural Gas Furnace	^^	^^	0.0	0.3	5.2	6.2	0.000
Projected Net Increase (TPY)	23.0 22.79	44.0 10.9	36.0	36.0	90.0	36.0	.540
PSD Threshold (TPY)	25	15	40	40	100	40	0.6

To clarify that baghouse RMDC5 must be in operation and controlling emissions at all times that the CKD Silo (EU48) is in operation the following revisions have been made to the permit.

SECTION D.3 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: (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.
--

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits * * *

* * *

(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)(A)	EU13	blending bins	RMDC6	0.53	0.53

Condition	Unit ID	Unit Description	Baghouse ID	Emission Limit	
				PM (lbs/hr)	PM ₁₀ (lbs/hr)
***	***	***	***	***	***

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:

~~(g)~~ 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.

Note: Baghouse RMDC5 also controls the blending bins, identified as EU13, which are permitted in Section D.3 of this permit. Therefore, compliance determination and compliance monitoring requirements that would be duplicative to conditions in Section D.3 are not required under this D Section.

D.6.1 Prevention of Significant Deterioration (PSD) Minor Limits ***

~~(g)~~ The material input to the CKD silo (EU48) 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.

~~(h)~~(g) ***

~~(i)~~(h) ***

~~(j)~~(i) ***

D.6.2 Particulate ***

(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.

TSD Comment 10:

To be consistent with the proposed Part 70 Operating Permit Renewal No. 093-24556-00002, the Compliance Determination for Kiln #1, Kiln #2, and Kiln under the Compliance Determination and Monitoring Requirements Section of the TSD should be revised as follows:

SO₂ Emissions

* * *

- (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, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

~~A determination of noncompliance pursuant to either of the methods specified in (A) or (B) above shall not be refuted by evidence of compliance pursuant to the other method.~~

- (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(g)]

Response to TSD Comment No. 10:

IDEM, OAQ agrees that the requested change is representative of the corresponding condition in the proposed Part 70 Operating Permit Renewal No. 093-24556-00002.

TSD Comment 11:

The Compliance Determination for Kiln #1, Kiln #2, and Kiln under the Compliance Determination and Monitoring Requirements Section of the TSD should be revised as follows:

Emission Controls Operation

The electrostatic precipitators (KP1) and (KP2), for particulate emissions control, shall be in operation and control particulate emissions whenever its associated kiln is in operation.

The spray towers for kiln #1 (EU15) and kiln #2 (EU16), for dioxins/furans control and SO₂ partial controlled, shall be in operation and control particulate emissions whenever its associated kiln is in operation.

These Compliance Determination Requirements for kiln #1 (EU15), kiln #2 (EU16), kiln #3 (EU17) are required to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) and ~~326 IAC 7-1.1 (SO₂ Emissions)~~, and to render 326 IAC 2-2 (PSD) not applicable to kiln #1 (EU15) and kiln #2 (EU16).

Response to TSD Comment No. 11:

IDEM, OAQ agrees that the requested change is correct. The electrostatic precipitators and spray towers are not necessary to ensure compliance with 326 IAC 7-1.1 (SO₂ Emissions).

TSD Comment 12:

The Compliance Assurance Monitoring (CAM) Plan for EU15 and EU16, under the Compliance Determination and Monitoring Requirements Section of the TSD, should be revised as follows:

Compliance Assurance Monitoring (CAM) Plan

* * *

The Permittee shall comply with the EU15 and EU16 **ESP inlet temperature** monitoring requirements for dioxin/furan 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.

These Compliance Monitoring Requirements are necessary because the ESPs and Spray Towers must operate properly at all times the associated facilities/processes are in operation to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) ~~and 326 IAC 7-1.1 (SO₂ Emissions)~~, and to render 326 IAC 2-2 (PSD) not applicable to kiln #1 (EU15) and kiln #2 (EU16).

Response to TSD Comment No. 12:

Under 40 CFR Part 63, Subpart LLL, the kilns are subject to monitoring requirements pertaining to the inlet temperature to the particulate matter control device (PMCD). Therefore, it is not necessary to specify "ESP inlet temperature" with regards to this CAM applicability determination.

IDEM, OAQ agrees that these Compliance Monitoring Requirements are not necessary to ensure compliance with 326 IAC 7-1.1 (SO₂ Emissions).

TSD Comment 13:

The Compliance Assurance Monitoring (CAM) Plan for clinker cooler #1 (EU19) and clinker cooler #2 (EU21), under the Compliance Determination and Monitoring Requirements Section of the TSD, should be revised as follows:

Compliance Assurance Monitoring (CAM) Plan

The Permittee shall comply with EU19 and EU21 monitoring requirements for PM and PM₁₀ 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 clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

These Compliance Monitoring Requirements are necessary because ~~the ESPs and Spray Towers must operate properly at all times the associated facilities/processes are in operation~~ to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) ~~and 326 IAC 7-1.1 (SO₂ Emissions)~~, and to render 326 IAC 2-2 (PSD) not applicable to clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

Response to TSD Comment No. 13:

IDEM, OAQ agrees that these Compliance Monitoring Requirements are not necessary to ensure compliance with 326 IAC 7-1.1 (SO₂ Emissions), and that the spray towers and ESPs do not control the clinker coolers. The second paragraph should have stated that the "baghouses must operate properly at all times the associated facilities/processes are in operation".

TSD Comment 14:

Appendix A: Emissions Calculations 40 CFR 60, 61 & 63 Applicability Determinations, Quarry Activities (drilling/blasting, hauling, handling, and storage) are not affected units under 40 CFR Part 60, Subpart OOO. Pursuant to 40 CFR 60.670(a), the following are affected facilities in fixed or portable nonmetallic mineral plants: each crusher, each grinding mill, each screening operation, each bucket elevator, each belt conveyor, each bagging operation, each storage bin, an each enclosed truck or railcar loading station.

Lehigh mines limestone from the quarry walls primarily by drilling and blasting. The fragmented stone is loaded into haul trucks using front-end loaders. The limestone is transported via the trucks to the crusher/screening building.

Response to TSD Comment No. 14:

IDEM, OAQ agrees that the Quarry Activities (drilling/blasting, hauling, handling, and storage) are not affected units under 40 CFR Part 60, Subpart OOO.

TSD Comment 15:

Appendix A: Emissions Calculations 40 CFR 60, 61 & 63 Applicability Determinations, Calcium Sulfate Material Facilities/Emission Units, the footnote should read as follows:

**** Until September 9, 2013, pursuant to 40 CFR 63.1356(a), these units are exempt from the requirements of 40 CFR Part 60, Subpart F since they are subject to 40 CFR Part 63, Subpart LLL. On and after September 9, 2013, pursuant to 40 CFR 60.62(d), these units are exempt from the requirements of 40 CFR 60, Subpart F, since they are subject to more stringent requirements under 40 CFR 63, Subpart LLL.**

Response to TSD Comment No. 15:

IDEM, OAQ agrees that the requested language clarifies the intent.

TSD Comment 16:

Appendix A: Emissions Calculations 40 CFR 60, 61 & 63 Applicability Determinations, Insignificant Activities, the applicability of the coal mills under NSPS Subpart F should be "not an affected facility." The coal mills are not affected facilities under 40 CFR Part 60, Subpart F because they do not fit the definition of an affected facility and their emissions exhaust to the kilns.

Page 24 of the TSD: "Fuel is not considered a raw material under the NSPS." Therefore, facilities associated with fuel to the kilns are not considered affected facilities under 40 CFR 60, Subpart F. The following facilities are not subject to the requirements of 40 CFR 60, Subpart F. One (1) coal unloading building, identified as F08, constructed in 1960. One (1) coal pile, identified as F04, storage commencing prior to 1971. Coal Mills #1 and #2, constructed prior to 1971. Note: The coal mills are not included in the permit since they have no applicable requirements. Coal mill #3, constructed in 1974. Note: The coal mills are not included in the permit since they have no applicable requirements.

Response to TSD Comment No. 16:

40 CFR Part 60, Subpart F has been amended and fuel is no longer specifically exempt from being considered a raw material. Therefore, the coal mills are considered affected facilities under 40 CFR Part 60, Subpart F. However, Coal Mills #1 and #2 pre-date the rule. Thus, the listed applicability determination is correct for Coal Mills #1 and #2. Coal Mill #3 exhausts to the kilns and not to atmosphere. Therefore, it has no applicable requirements under 40 CFR 60, Subpart F.

TSD Comment 17:

Appendix A: Emissions Calculations 40 CFR 60, 61 & 63 Applicability Determinations, Insignificant Activities, the applicability of the coal mills (Coal Mills #1, #2, and #3) under NSPS Subpart Y should be "not an affected facility." The coal mills are not affected facilities under 40 CFR Part 60, Subpart Y, since they do not fit the definition of a thermal dryer under 40 CFR

60.251(r)(1) because they exhaust into the kilns. Note: The coal mills are not included in the permit since they have no applicable requirements.

Response to TSD Comment No. 17:

IDEM, OAQ agrees that the coal mills are not affected facilities under 40 CFR Part 60, Subpart Y, since they do not meet the definition under the NSPS of a thermal dryer.

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

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

Source Description and Location

Source Name:	Lehigh Cement Company LLC
Source Location:	180 North Meridian Road, Mitchell, Indiana 47446
County:	Lawrence
SIC Code:	3241
NAICSS Code:	32731
Permit Renewal No.:	T 093-24556-00002
Permit Reviewer:	Jenny Acker

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Lehigh Cement Company LLC relating to the operation of a stationary portland cement manufacturing plant. On April 2, 2007, Lehigh Cement Company LLC submitted an application to the OAQ requesting to renew its operating permit. Lehigh Cement Company LLC was issued its first Part 70 Operating Permit (T093-5990-00002) on December 30, 2002.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (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) Kiln #1 and 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 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.

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, the conveyor transfer points associated with this facility 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.

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 is considered an affected source.
- (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 is considered an affected source.
- (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 is considered an affected source.
- (7) One (1) enclosed CKD conveyor #1, identified as EU50, approved for construction in 2004, maximum throughput: 50 tons per hour.
- (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.
- (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 is considered an affected source.
- (12) One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, approved for construction in 2004, potential capacity: 0.10 acre.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (2) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (c) Combustion source flame safety purging on startup.

- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (e) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 3,500 gallons per day.
- (f) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (g) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (h) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (i) 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]
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Heat exchanger cleaning and repair.
- (l) Paved and unpaved roads and parking lots with public access.
- (m) Conveyors as follows:
 - (1) One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.
 - (2) Underground conveyors with PM controlled by total enclosure.
- (n) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (o) On-site fire and emergency response training approved by the department.
- (p) Emergency generators as follows:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
- (q) Purge double block and bleed valves.
- (r) A laboratory as defined in 326 IAC 2-7-1(21)(H).
- (s) Other categories with emissions below insignificant thresholds as follows:

- (1) Two (2) grinding aid storage tanks.
 - (2) Three (3) Airalon/Airplas storage tanks.
 - (3) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter controlled by total enclosure.
- (t) General List of Trivial/Insignificant Activities
- (1) Combustion Activities including the following:
 - (A) Portable electrical generators that can be moved by hand from one location to another.
 - (B) Combustion emissions from propulsion of mobile sources.
 - (2) Ventilation and venting related equipment including the following:
 - (A) Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants.
 - (B) Stacks and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste.
 - (C) Vents from continuous emissions monitors and other analyzers.
 - (D) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
 - (E) Air vents from air compressors.
 - (F) Vents for air cooling of electric motor provided the air does not commingle with regulated air pollutants.
 - (3) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:
 - (A) Painting including interior and exterior painting of buildings, and solvents use, excluding degreasing utilizing halogenated solvents.
 - (B) Brazing, soldering, or welding operation and associated equipment.
 - (C) Batteries and battery charging stations, except at battery manufacturing plants.
 - (D) Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
 - (E) Non-asbestos insulation installation or removal.
 - (F) Instrument air dryer and filter maintenance.
 - (4) Activities performed using hand-held equipment including the following:

- Drilling	- Cutting, excluding cutting torches
- Grinding	- Turning wood, metal or plastic
- Sanding	- Surface grinding-
- Sawing	- Machining wood, metal or plastic
- Surface grinding	

- (5) Housekeeping and janitorial activities and supplies including the following:
 - (A) vacuum cleaning systems used exclusively for housekeeping or custodial activities or both.
 - (B) Steam cleaning activities
 - (C) Restrooms and associated cleanup operations and supplies.
 - (D) Mobile floor sweepers and floor scrubbers.

- (6) Office related including the following:
 - (A) Office supplies and equipment.
 - (B) Photocopying equipment and associated supplies.
 - (C) Paper shredding.
 - (D) Blueprint machines, photographic equipment, and associated supplies.

- (7) Sampling and testing equipment and activities including the following:
 - (A) Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
 - (B) Hydraulic and hydrostatic testing equipment.
 - (C) Ground water monitoring wells and associated sample collection equipment.
 - (D) Environmental chambers not using hazardous air pollutant (HAP) gases.
 - (E) Humidity chambers.
 - (F) Sampling activities including: Sampling of waste.
 - (G) Instrument air dryers and distribution.

- (8) Storage equipment and activities including:
 - (A) Pressurized storage tanks and associated piping for liquid petroleum gas (LPG) and liquid natural gas (LNG) (propane).
 - (B) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.
 - (C) Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
 - (D) Storage of drums containing maintenance raw materials.
 - (E) Storage of castings.
 - (F) Portable container used for the collection, storage, or disposal of materials provided the container capacity is equal to or less than 0.46 cubic meters and the container is closed except when the material is added or removed.

- (9) Emergency and standby equipment including:
 - (A) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

 - (B) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:
 - (i) Explosion relief vents, diaphragms or panels.
 - (ii) Rupture discs.
 - (iii) Safety relief valves.

- (C) Activities and equipment associated with on-site medical care not otherwise specifically regulated.
- (D) Vacuum producing devices for the purpose of removing potential accidental releases.
- (10) Activities associated with production including the following:
 - (A) Air compressors and pneumatically operated equipment, including hand tools.
 - (B) Compressor or pump lubrication and seal systems.
 - (C) Handling of solid steel, including coils and slabs, excluding scrap burning, scarfing, and charging into steel making furnaces and vessels.
- (11) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:
 - (A) Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.
 - (B) Manual loading and unloading operations.
 - (C) Construction and demolition operations.
 - (D) Mechanical equipment gear boxes and vents which are isolated from process materials.
- (12) Activities generating limited amounts of fugitive dust including: Road salting and sanding.

Existing Approvals

Since the issuance of the Part 70 Operating Permit (T093-5990-00002) on December 30, 2002, the source has constructed or has been operating under the following additional approvals:

Permit Type	Permit Number	Issuance Date
Temporary Operation	093-30776-00002	August 24, 2011
Review Request	093-30083-00002	March 7, 2011
Administrative Amendment	093-29193-00002	May 24, 2010
Temporary Operation	093-27479-00002	February 24, 2009
Temporary Operation	093-27154-00002	November 25, 2008
Temporary Operation	093-24542-00002	April 20, 2007
Temporary Operation	093-24208-00002	February 7, 2007
Temporary Operation	093-24015-00002	December 19, 2006
Temporary Operation	093-23381-00002	August 2, 2006
Significant Permit Modification	093-21975-00002	July 7, 2006
Significant Source Modification	093-21793-00002	June 26, 2006
Minor Permit Modification	093-21919-00002	April 17, 2006
Revocation	093-21954-00002	November 10, 2005
Minor Source Modification	093-21778-00002	October 27, 2005
Administrative Amendment	093-21136-00002	April 26, 2005

Permit Type	Permit Number	Issuance Date
Administrative Amendment	093-20912-00002	April 8, 2005
Temporary Operation	093-20115-00002	March 11, 2005
Significant Permit Modification	093-18649-00002	November 5, 2004
Significant Source Modification	093-19158-00002	November 5, 2004
Title V Interim	093-19158I-00002	July 8, 2004
Significant Permit Modification	093-16851-00002	July 11, 2003
Significant Source Modification	093-15822-00002	June 24, 2003
Title V Interim	093-15822I-00002	April 23, 2003

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in 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.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x 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 NO_x 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} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (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, and 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
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
GHG as CO ₂ e	Greater than 100,000

HAPs	tons/year
Single HAP	Greater than 10
Total HAPs	Greater than 25

The Permittee has agreed that this source is major for Part 70 Permits 326 IAC 2-7, Prevention of Significant Deterioration (PSD) 326 IAC 2-2, and Hazardous Air Pollutants 326 IAC 20. No calculations of unrestricted Potential to Emit have been done.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM₁₀, PM_{2.5}, SO₂, VOC, CO, and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2007 OAQ emission data.

Pollutant	Actual Emissions (ton/yr)
PM	not reported
PM ₁₀	561
PM _{2.5}	not reported
SO ₂	887
VOC	54
CO	316
NO _x	2,502
Total HAPs	not reported

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

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

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

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

Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)	
Pollutant	Tons/year
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.

Federal Rule Applicability Determination

CAM

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:

- (1) has a potential to emit before controls equal to or greater than the Part 70 Major Source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following tables are used to identify the applicability of each of the criteria, under 40 CFR 64.1.

- (a) PM and PM₁₀

Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM and PM10 (Group 1)							
EU01	QDC2	Y	> 100	< 100	100	Y	N
EU02	QDC3	Y	> 100	< 100	100	Y	N
EU03/EU04	QDC4	Y	> 100	< 100	100	Y	N
EU06	QDC6	Y	> 100	< 100	100	Y	N
EU07	QDC7	Y	> 100	< 100	100	Y	N
EU08	QDC8	Y	> 100	< 100	100	Y	N

Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU09	RMDC1	Y	> 100	< 100	100	Y	N
EU10	RMDC2	Y	> 100	< 100	100	Y	N
EU11	RMDC3	Y	> 100	< 100	100	Y	N
EU12	RMDC4	Y	> 100	< 100	100	Y	N
EU13	RMDC5/6	Y	> 100	< 100	100	Y	N
EU14	RMDC7/8	Y	> 100	< 100	100	Y	N
EU18	KDC1	Y	> 100	< 100	100	Y	N
EU20	KDC3	Y	> 100	< 100	100	Y	N
EU24	KDC7	Y	> 100	< 100	100	Y	N
EU24A	KDC7A	Y	> 100	< 100	100	Y	N
EU24B	KDC7B	Y	> 100	< 100	100	Y	N
EU25	FDC1	Y	> 100	< 100	100	Y	N
EU27	FDC3	Y	> 100	< 100	100	Y	N
EU29	FDC5	Y	> 100	< 100	100	Y	N
EU31	FDC7	Y	> 100	< 100	100	Y	N
EU32	FDC8	Y	> 100	< 100	100	Y	N
EU33	FDC9	Y	> 100	< 100	100	Y	N
EU34	FDC10	Y	> 100	< 100	100	Y	N
EU35	FDC11	Y	> 100	< 100	100	Y	N
EU36	FDC12	Y	> 100	< 100	100	Y	N
EU37	FDC13	Y	> 100	< 100	100	Y	N
EU38	FDC14	Y	> 100	< 100	100	Y	N
EU39A	SDC1	Y	> 100	< 100	100	Y	N
EU39B	SDC2	Y	> 100	< 100	100	Y	N
EU40A	SDC3	Y	> 100	< 100	100	Y	N
EU40B	SDC4	Y	> 100	< 100	100	Y	N
EU41	SDC5	Y	> 100	< 100	100	Y	N
EU42	SDC6	Y	> 100	< 100	100	Y	N
EU43	SDC7	Y	> 100	< 100	100	Y	N
EU44	SDC8	Y	> 100	< 100	100	Y	N
EU45	SDC9	Y	> 100	< 100	100	Y	N
EU46	SDC10	Y	> 100	< 100	100	Y	N
EU47	SDC11/12	Y	> 100	< 100	100	Y	N
PM and PM10 (Group 2)							
EU28	FDC4	Y	> 100	< 100	100	Y	N
EU30	FDC6	Y	> 100	< 100	100	Y	N
PM and PM10 (Group 3)							
EU05	QDC5	Y	< 100 (PM) > 100 (PM10)	< 100	100	N (PM) Y (PM10)	N
PM and PM10 (Group 4)							
EU22	KDC5	Y (PM) N (PM10)	>100	<100	100	Y (PM) N (PM10)	N
PM and PM10 (Group 5)							
EU26a	FDC2	Y (PM) Y (PM10)	> 100	< 100	100	Y	N
EU26b		Y (PM) N (PM10)					
EU26c		N (PM) N (PM10)					
PM and PM10 (Group 6)							
EU15	KP1 (ESP)	Y	> 100	< 100	100	Y	N

Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU16	KP2 (ESP)	Y	> 100	< 100	100	Y	N
EU19	KDC2	Y	> 100	< 100	100	Y	N
EU21	KDC4	Y	> 100	< 100	100	Y	N
PM and PM10 (Group 7)							
EU17	KP3 (ESP)	Y (PM) N (PM10)	> 100	< 100	100	N	N
EU23	KDC6	Y (PM) N (PM10)	> 100	< 100	100	N	N

Note: Pursuant to 40 CFR 64.5(a), *Large pollutant-specific emissions unit* is defined as a pollutant-specific emissions unit with the potential to emit (taking into account control devices to the extent appropriate under the definition of this term in §64.1) the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Group 1 Units Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to the Group 1 units, for PM and PM10, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM and PM₁₀, are subject to an emissions limit for PM [326 IAC 2-2 and 326 IAC 6-3-2], and PM₁₀ [326 IAC 2-2], and use a control device to comply with the emissions limits. The Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Group 2 Units Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Group 2 units, for PM and PM10, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM and PM₁₀, are subject to an emissions limit for PM [326 IAC 2-2], and PM₁₀ [326 IAC 2-2], and use a control device to comply with the emissions limits. The Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Group 3 Unit Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the Group 3 unit, for PM, because the uncontrolled potential to emit is less than the major source threshold for PM.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Group 3 unit, for PM10, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. The requirements of CAM are applicable because the unit has uncontrolled potential to emit above the major source thresholds for PM₁₀, is subject to an emissions limit for PM₁₀ [326 IAC 2-2], and uses a control device to comply with the emissions limit. The Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Group 4 Unit Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Group 4 unit, for PM, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. The requirements of CAM are applicable because the unit has uncontrolled potential to emit above the major source thresholds for PM, is subject to an

emissions limit for PM [326 IAC 6-3-2], and uses a control device to comply with the emissions limit. The Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the Group 4 unit, for PM₁₀, since there are no applicable limits for PM₁₀.

Group 5 Units Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, are applicable to EU26a, for PM and PM₁₀, and to EU26b, for PM, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. Although EU26c is not subject to CAM it shares a common control device (baghouse FDC2) with EU26a and EU26b. Therefore, CAM monitoring applies to baghouse FDC2. The requirements of CAM are applicable because EU26a and EU26b each have an uncontrolled potential to emit above the major source thresholds for PM and are subject to emissions limits for PM [326 IAC 2-2 and 326 IAC 6-3-2], and EU26a has an uncontrolled potential to emit above the major source threshold for PM₁₀ and is subject to an emissions limit for PM₁₀ [326 IAC 2-2]. The Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Group 6 Units Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Group 6 units for PM and PM₁₀ upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM and PM₁₀, are subject to an emissions limit for PM [326 IAC 2-2 and 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry)], and for PM₁₀ [326 IAC 2-2], and use a control device to comply with the emissions limits. Pursuant to 40 CFR 64.2(b)(1)(i), the requirements of CAM shall not apply to emission limitations or standards required by a NESHAP proposed after November 15, 1990. Therefore, the requirements of CAM do not apply to these units for PM emission limitations established under 40 CFR 63, Subpart LLL.

The Group 6 Units are limited as follows:

Emission Unit (ID)	PM		PM10 326 IAC 2-2
	326 IAC 2-2	40 CFR 63, Subpart LLL	
Kiln #1 (EU15)	0.28 lb/ton clinker	0.3 lb/ton feed (dry basis)	0.59 lb/ton clinker
Kiln #2 (EU16)	0.28 lb/ton clinker	0.3 lb/ton feed (dry basis)	0.59 lb/ton clinker
Clinker Cooler #1 (EU19)	11.41 lb/hr	0.1 lb/ton feed (dry basis)	11.41 lb/hr
Clinker Cooler #1 (EU21)	11.41 lb/hr	0.1 lb/ton feed (dry basis)	11.41 lb/hr

Since a portion of the dry feed is collected by the electrostatic precipitators and baghouses during the clinker production process, it is appropriate that the 0.3 lb PM per ton dry feed limit under 40 CFR 63, Subpart LLL, can be considered equivalent to the 0.28 lb PM per ton clinker limit under 326 IAC 2-2.

Therefore, it has been determined that compliance with the monitoring requirements of 40 CFR 63, Subpart LLL satisfies the monitoring requirements of 40 CFR 64 for PM and PM₁₀ emission limitations under 326 IAC 2-2.

Additionally, 40 CFR 63, Subpart LLL, contains requirements equivalent to the following Part 70 Compliance Monitoring Requirements:

Maintenance of Continuous Opacity Monitoring (COM) Equipment

In the event that a breakdown of the COM monitoring stack S-KP2 occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. If the reason for the breakdown is not able to be determined, the Permittee shall include in its record that a reason for the breakdown was not determined.

Therefore the above language will not be included in the permit for kiln #1 (EU15), kiln #2 (EU16), clinker cooler #1 (EU19), and clinker cooler #2 (EU21).

Group 7 Unit Evaluation

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the Group 7 units, for PM. The only applicable PM limit is pursuant to 40 CFR 63, Subpart LLL. Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act are exempt from the requirements of CAM.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the Group 7 units, for PM₁₀, since there are no applicable limits for PM₁₀.

Additionally, 40 CFR 63, Subpart LLL, contains requirements equivalent to the following Part 70 Compliance Monitoring Requirements:

Maintenance of Continuous Opacity Monitoring (COM) Equipment

In the event that a breakdown of the COM monitoring stack S-KP2 occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. If the reason for the breakdown is not able to be determined, the Permittee shall include in its record that a reason for the breakdown was not determined.

Therefore the above language will not be included in the permit for kiln #3 (EU17) and clinker cooler #1 (EU23).

(b) SO₂

Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
SO₂							
EU15	Water Spray Tower	Y	> 100	< 100	100	⁽¹⁾ Y	N
EU16	Water Spray Tower	Y	> 100	< 100	100	⁽¹⁾ Y	N
EU17	N	Y	> 100	< 100	100	⁽²⁾ N	N

Note: Pursuant to 40 CFR 64.5(a), *Large pollutant-specific emissions unit* is defined as a pollutant-specific emissions unit with the potential to emit (taking into account control devices to the extent appropriate under the definition of this term in §64.1) the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

- (1) As part of the Significant Source Modification No: 093-15822-00002 and Significant Permit Modification No: 093-16851-00002 permitting actions, the OAQ made the following determination.

A SO₂ Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the kiln #1 (EU15) and kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control and the source is subject to emission limitations for SO₂ [326 IAC 2-2 and 326 IAC 7-1.1-1]. Kilns #1 and #2 are each equipped with a spray tower which aids in the reduction of SO₂ emissions and are also used to prevent the formation of dioxin and furan emissions from the kilns. The dioxin and furan emissions are regulated under Subpart LLL. Compliance with the EU15 and EU16 monitoring requirements for dioxin/furan of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64 for SO₂.

As part of this permitting action (T 093-24556-00002), the above determination is being modified. The water spray towers are not required to comply with the emission limitations established under 326 IAC 7-1.1-1.

- (2) Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to kiln #3 (EU17) for SO₂, upon issuance of this Part 70 Operating Permit Renewal No. 093-24556-00002.

NSPS

40 CFR 60, Subpart F

- (a) Pursuant to 40 CFR 60.60, affected facilities include kilns, clinker coolers, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, and bagging and bulk loading and unloading systems constructed or modified after the applicability date of August 17, 1971. Therefore, the following are considered affected facilities under the New Source Performance Standard (NSPS) for Portland Cement Plants.
- Conveyor system transfer points associated with the Kiln #1 alternative fuel delivery system, identified as F19, approved for construction in 2006.
 - Conveyor system transfer points associated with the Kiln #2 alternative fuel delivery system, identified as F20, approved for construction in 2006.
 - One (1) kiln feed bin #3, identified as EU22, constructed in 1974.
 - One (1) south clinker tower, identified as EU27, constructed in 1974.
 - One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974.
 - One (1) finish mill #4 separator, identified as EU36, constructed in 1989.
 - One (1) lime bin, identified as EU38, constructed in 1993.
 - One (1) packing machine, identified as EU47, constructed in 1984.
 - 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.
 - 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.
 - One (1) kiln #3, identified as EU17, constructed in 1974.
 - One (1) clinker cooler #3, identified as EU23, constructed in 1974.
 - One (1) synthetic gypsum hopper, identified as F11, approved for construction in 2004.

- Conveyor system transfer points associated with the synthetic gypsum weight belt, identified as F15, approved for construction in 2004.
- One (1) raw material hopper, identified as F13, approved for construction in 2004.
- Conveyor system transfer points associated with the raw material weight belt, identified as F16, approved for construction in 2004.
- One (1) main belt #1, identified as F17, approved for construction in 2004.
- One (1) enclosed pugmill, identified as EU49, approved for construction in 2004.
- Conveyor system transfer points associated with the main belt #2, identified as F18, approved for construction in 2004.
- One (1) roll crusher, identified as EU31, constructed in 1987.

- (1) However, pursuant to 40 CFR 63.1356(a) [64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006], until September 9, 2013, the facilities are exempt from 40 CFR Part 60, Subpart F because they are subject to 40 CFR Part 63, Subpart LLL.
- (2) On and after September 9, 2013, pursuant to 40 CFR 60.62(d), for an affected source subject to this subpart (40 CFR 60, Subpart F) with a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, you must comply with the most stringent emission limit or requirement. Therefore, you are not subject to the less stringent requirement.

The affected sources are subject to the following requirements:

Requirement	40 CFR 60, Subpart F	40 CFR 63, Subpart LLL
<i>kiln #1 (EU15), kiln #2 (EU16), & kiln #3 (EU17)</i>		
PM	0.30 lb per ton feed (dry basis)	0.30 lb per ton feed
Opacity	not to exceed 20%	not to exceed 20%
<i>clinker cooler #3 (EU23)</i>		
PM	0.10 lb per ton feed (dry basis)	0.10 lb per ton feed
Opacity	not to exceed 10%	not to exceed 10%
<i>remaining affected facilities</i>		
Opacity	not to exceed 10%	not to exceed 10%

Since the limitations are the same under both regulations and the affected units have been subject to 40 CFR 63, Subpart LLL since construction, the source will continue to comply with the requirements of 40 CFR 63, Subpart LLL.

- (b) The following facilities that were altered after August 17, 1971 were not considered modifications for the purpose of Subpart F. Therefore, they pre-dated the applicability date.
- (1) South Storage Drag (EU25) - Although the South Storage Drag (SSD) was constructed in 1974, which is after the applicability date of August 17, 1971, conveyors are not considered affected facilities for the purposes of Subpart F. Subpart F considers the conveyor transfer points of the affected facilities. Since the SSD replaced an existing conveyor, the transfer points already existed. Since baghouses were added to the transfer points, emissions did not increase due to this change. Therefore, no modification occurred due to this addition.
- (2) Pan Conveyor (EU29) - Although the pan conveyor was constructed in 1979, which is after the applicability date of August 17, 1971, conveyors are not considered affected facilities for the purposes of Subpart F. Subpart F considers the conveyor transfer points of the affected facilities. Since the pan conveyor

replaced an existing conveyor, the transfer points already existed. Since baghouses were added to the transfer points, emissions did not increase due to this change. Therefore, for the purposes of NSPS applicability, no modification occurred due to this addition.

- (3) Finish Material Storage and Bulk Loadout - Subpart F does not apply to these facilities, which include the north and south silos (EU39A & EU39B), silo transfer system (EU40A & EU40B), east truck loadout bin (EU41) and vaculoader (EU42), west truck loadout bin (EU43) and vaculoader (EU44), and the railroad loadout bin (EU45) and articuloader (EU46), because based on information from the source, the only modifications to these systems made after August 17, 1971 was the addition of baghouses which reduced PM emissions.
 - (4) Raw mills #1 (EU11) and #2 (EU12) - When permitted the natural gas-fired burners (EU11A and EU12A) were limited to operation only when the existing 37 million Btu per hour coal-fired stoker was not operating. Therefore, there was no emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subpart F, were determined not to apply. The coal-fired stoker was subsequently removed from source, but the previous determination of no emissions increase is still applicable.
 - (5) The three (3) clinker ladders (hot spout clinker ladder (EU28), east clinker ladder (EU30), and scrap bin clinker ladder (EU26c)) are not subject to the requirements of Subpart F, because the ladders are not conveyor transfer points and they are not emission units. The ladders are "flaps" which were installed to reduce the drop height from transfer points, thus resulting in reduced emissions. Therefore, these ladders are not affected facilities, and are not subject to Subpart F.
- (c) Storage piles are not considered affected facilities under the NSPS. Therefore, the following facilities are not considered affected sources under 40 CFR 60, Subpart F.
- Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971.
 - Two (2) storage piles, identified as F10 and F12, approved for construction in 2004.
 - One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, approved for construction in 2004.
- (d) Fuel is not considered a raw material under the NSPS. Therefore, facilities associated with fuel to the kilns are not considered affected facilities under 40 CFR 60, Subpart F. The following facilities are not subject to the requirements of 40 CFR 60, Subpart F.
- One (1) coal unloading building, identified as F08, constructed in 1960.
 - One (1) coal pile, identified as F04, storage commencing prior to 1971.
 - Coal Mills #1 and #2, constructed prior to 1971. Note: The coal mills are not included in the permit since they have no applicable requirements.
 - Coal mill #3, constructed in 1974. Note: The coal mill is not included in the permit since it has no applicable requirements.
- (e) The first affected facilities 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. Therefore, the following facilities are not considered affected facilities under 40 CFR 60, Subpart F, and are not subject to the requirements of the NSPS for Portland Cement Plants.

- One (1) shale crusher, identified as EU10, constructed in 1961.
 - Quarry Activities
 - Quarry Material Sizing Facilities
 - Cement Kiln Dust Storage, Disposal, Mining, and Handling Facilities
- (f) The remainder of the affected facilities at Lehigh Cement Company LLC are not subject to the NSPS for Portland Cement Plants (40 CFR 60, Subpart F) because they were constructed prior to the applicability date of August 17, 1971.
- (g) The requirements of the New Source Performance Standard (NSPS) for Portland Cement Plants are not included in this permit.

40 CFR 60, Subpart K

The requirements of the New Source Performance Standard (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 (40 CFR 60, Subpart K) are not included in this permit. None of the petroleum storage tanks at Lehigh have storage capacities equal to or greater than 40,000 gallons.

40 CFR 60, Subpart Ka

The requirements of the New Source Performance Standard (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart K) are not included in this permit. None of the petroleum storage tanks at Lehigh have storage capacities equal to or greater than 40,000 gallons.

40 CFR 60, Subpart Kb

The requirements of the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60, Subpart Kb) are not included in this permit. None of the tanks at Lehigh for which construction, reconstruction, or modification commenced after July 23, 1984 which store volatile organic liquids (VOL) have storage capacities equal to or greater than 19,812.90 gallons.

40 CFR 60, Subpart Y

The coal processing facilities at Lehigh Cement Company LLC meet the definition of a coal preparation plant under the New Source Performance Standard (NSPS) for Coal Preparation and Processing Plants (40 CFR 60, Subpart Y), because they pulverize coal. The coal mills are not affected facilities since they do not meet the definition of "thermal dryers" under 40 CFR 60.251(r)(1) because they do not exhaust to atmosphere. The coal mills exhaust to the kilns. The remaining facilities involved in coal preparation commenced construction, reconstruction, or modification prior to the applicability date of October 27, 1974.

Therefore, the following facilities are not subject to the requirements of the NSPS.

- One coal feeder conveyor and one coal unloading conveyor, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.
- Coal Mills #1 and #2, constructed prior to 1974. Note: The coal mills are not included in the permit since they have no applicable requirements.

- Coal mill #3, constructed in 1974. Note: The coal mill is not included in the permit since it has no applicable requirements.

The requirements of the New Source Performance Standard (NSPS) for Coal Preparation and Processing Plants (40 CFR 60, Subpart Y) are not included in this permit.

40 CFR 60, Subpart OOO

- (a) The following mineral processing facilities at Lehigh Cement Company LLC meet the definition of a nonmetallic mineral processing plant. However, none of the facilities commenced construction, reconstruction, or modification after the applicability date of August 31, 1983. Therefore, the requirements New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO) do not apply.
- Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971.
 - One (1) primary crusher, identified as EU01, constructed in 1965.
 - One (1) surge bin and transfer system, identified as EU02, constructed in 1965.
 - One (1) secondary crusher, identified as EU03, constructed in 1965.
 - One (1) tertiary crusher, identified as EU04, constructed in 1965.
 - One (1) north screen house, identified as EU05, constructed in 1965.
 - One (1) south screen house, identified as EU06, constructed in 1965.
 - One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965.
 - One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08.
 - One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965.
 - A conveying system to transport raw material to storage, identified as EU09, constructed in 1960.
 - One (1) shale crusher, identified as EU10, constructed in 1961.
- (b) Pursuant to the U.S. EPA Applicability determination No. 9600050, June 15, 1995, "[t]he nonmetallic mineral processing plant ends after the secondary crusher conveyor and the raw mill system (40 CFR Part 60, Subpart F), and begins with the raw material storage facility." Therefore, the one (1) material storage building, identified as F03, is not considered an affected source under the New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO).
- (c) The following facilities are considered affected sources under the New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO), that commenced construction, reconstruction, or modification after the applicability date of August 31, 1983.
- One (1) synthetic gypsum hopper, identified as F11, approved for construction in 2004.
 - One (1) synthetic gypsum weight belt, identified as F15, approved for construction in 2004.
 - One (1) raw material hopper, identified as F13, approved for construction in 2004.
 - One (1) raw material weight belt, identified as F16, approved for construction in 2004.
 - One (1) main belt #1, identified as F17, approved for construction in 2004.
 - One (1) enclosed pugmill, identified as EU49, approved for construction in 2004.
 - One (1) main belt #2, identified as F18, approved for construction in 2004.

- (1) However, pursuant to 40 CFR 63.1356(a) [64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006], until September 9, 2013, the facilities are exempt from 40 CFR Part 60, Subpart OOO because they are subject to 40 CFR Part 63, Subpart LLL.
- (2) On and after September 9, 2013, pursuant to 40 CFR 63.1356 - Sources with Multiple Emission Limits or Monitoring Requirements [75 FR 55064, Sept. 9, 2010]: if an affected facility is subpart to this subpart (40 CFR Part 63, Subpart LLL) has a different emission limit or requirement for the same pollutant under another regulation in Title 40 of this chapter (Chapter I), the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.

The affected sources are subject to the following requirements:

Requirement	40 CFR 60, Subpart OOO	*40 CFR 63, Subpart LLL
Opacity	not to exceed 10%	not to exceed 10%
Performance Testing	initial & once every 5 yrs using Method 9	monthly using Method 22 upon completing 6 consecutive monthly tests with no visible emissions observed , the source may decrease testing to semi-annual upon observation during a semi-annual test, the source shall resume monthly testing

* National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL), *that became effective on November 8, 2010*, 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).

Although the opacity limitation is the same under both regulations, the frequency of the performance testing is more stringent under 40 CFR 63, Subpart LLL. Therefore, the facilities shall comply with the requirements of 40 CFR 63, Subpart LLL and are exempt from the requirements of 40 CFR 60, Subpart OOO.

40 CFR 60, Subpart UUU

The requirements of the New Source Performance Standard (NSPS) for Calciners and Dryers in Mineral Industries (40 CFR 60, Subpart UUU) are not included in the permit. The source does not fit the definition of a mineral processing plant.

NESHAP

40 CFR 63, Subpart T

The parts washer at this source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Degreasers (40 CFR 63, 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. The requirements of the NESHAP for Halogenated Solvent Degreasers (40 CFR 63, Subpart T) are not included in the permit.

40 CFR 63, Subpart LLL

(a) On September 9, 2010, the U.S. EPA published amendments to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) at 75 FR 54970. The amendments broadened the definitions of affected facilities, and included new PM, mercury, THC, and HCl emissions limits for existing facilities. On January 18, 2011, the U.S. EPA published a final direct action on the amendments to the NESHAP for the Portland Cement Manufacturing Industry at 76 FR 2832. This final direct action amends certain regulatory text to clarify the compliance dates and the previously issued emission limits that were changed in the September 9, 2010 action to remain in effect until sources are required to comply with revised limits. This action became effective March 21, 2011.

(b) Pursuant to 40 CFR 63.1351(c) [76 FR 2837, Jan. 18, 2011], the compliance date for existing sources for all the requirements that became effective on November 8, 2010 is September 9, 2013. Therefore, until September 9, 2013, the source shall comply with the rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) 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).

(1) The following is an analysis of the applicability of the requirements of the NESHAP, until September 9, 2013.

- (A) Each kiln, except for kilns that burn hazardous waste and are subject to and regulated under 40 CFR 63, Subpart EEE, is considered an affected source.
- (B) Each clinker cooler, raw mill, finish mill, and raw material dryer is considered an affected source.
- (C) Each bagging and bulk loading and unloading system is considered an affected source.
- (D) Each raw material, clinker, or finished product storage bin, is considered an affected source.

Pursuant to 40 CFR 63.1341, "feed does not include the fuels used in the kiln to produce heat to form the clinker product." Therefore, the coal mills (Insignificant Activities) are not considered Raw Material Dryers under the NESHAP.

- (E) Each conveying system transfer point, including those associated with coal preparation used to convey coal from the mill to the kiln, is considered an affected source.
- (F) Pursuant to 40 CFR 63.1340(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. Therefore, the following facilities are not considered affected sources under the NESHAP.

- Drilling/blasting, hauling, handling and storage, identified as F01.
- One (1) primary crusher, identified as EU01.
- One (1) surge bin and transfer system, identified as EU02.
- One (1) secondary crusher, identified as EU03.
- One (1) tertiary crusher, identified as EU04.
- One (1) north screen house, identified as EU05.
- One (1) south screen house, identified as EU06.
- One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07.
- One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08.
- One (1) belt #9 to belt #10 conveyor transfer point, identified as F02.
- One (1) cement kiln dust (CKD) bin, identified as EU24.
- One (1) CKD truck unloading system, identified as EU24A.
- One (1) CKD mixer, identified as EU24B.
- One (1) CKD truck loadout, identified as F07.
- CKD disposal and mining facilities, identified as F05.
- A conveying system to transport raw material to storage, identified as EU09.
- One (1) shale crusher, identified as EU10.
- One (1) coal unloading building, identified as F08.
- Coal feed conveyor. Note: The coal feed conveyor is not included in the permit since it has no applicable requirements.
- Coal unloading conveyor. Note: The coal unloading conveyor is not included in the permit since it has no applicable requirements.
- Coal Mills
- One (1) scrap bin clinker ladder, identified as EU26c.
- One (1) hot spout clinker ladder, identified as EU28.
- One (1) east clinker ladder, identified as EU30.

(H) Open/enclosed material stockpiles and haul roads are not affected sources. Therefore, the following facilities are not considered affected sources under the NESHAP.

- One (1) coal pile, identified as F04.
- Raw material stockpiles collectively, identified as F09.
- Two (2) storage piles, identified as F10 and F12.
- One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14.

(2) The following facilities are subject to rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) 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).

- One (1) material storage building, identified as F03.
- One (1) Kiln #1 alternative fuel delivery system, identified as F19 (transfer points only).

- One (1) Kiln #2 alternative fuel delivery system, identified as F20 (transfer points only).
- One (1) raw mill #1, identified as EU11.
- One (1) raw mill #2, identified as EU12.
- Blending bins, identified as EU13.
- Kiln supply silos, identified as EU14.
- One (1) kiln feed bin #1, identified as EU18.
- One (1) kiln feed bin #2, identified as EU20.
- One (1) kiln feed bin #3, identified as EU22.
- One (1) south storage drag, identified as EU25 (transfer points only).
- One (1) north clinker tower, identified as EU26a (transfer points only).
- One (1) North storage drag, identified as EU26b (transfer points only).
- One (1) south clinker tower, identified as EU27 (transfer points only).
- One (1) pan clinker conveyor, identified as EU29 (transfer points only).
- One (1) roll crusher, identified as EU31.
- One (1) finish mill #1 with associated feed bin, identified as EU32.
- One (1) finish mill #2 with associated feed bin, identified as EU33.
- One (1) finish mill #3 with associated feed bin, identified as EU34.
- One (1) finish mill #4 with associated feed bin, identified as EU35.
- One (1) finish mill #4 separator, identified as EU36.
- One (1) lime bin, identified as EU38.
- One (1) surge bin, identified as EU37.
- A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B.
- A silo transfer system, identified as EU40A and EU40B (transfer points only).
- One (1) east truck loadout bin, identified as EU41.
- One (1) east truck vaculoader, identified as EU42.
- One (1) west truck loadout bin, identified as EU43.
- One (1) west truck vaculoader, identified as EU44.
- One (1) truck loadout station, identified as F06.
- One (1) railroad loadout bin, identified as EU45.
- One (1) articuloader, identified as EU46.
- One (1) packing machine, identified as EU47.
- 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.
- 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.
- One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln.
- One (1) clinker cooler #1, identified as EU19, constructed in 1959.
- One (1) clinker cooler #2, identified as EU21, constructed in 1959.
- One (1) clinker cooler #3, identified as EU23, constructed in 1974.
- One (1) synthetic gypsum hopper, identified as F11.
- One (1) synthetic gypsum weight belt, identified as F15 (transfer points only).
- One (1) raw material hopper, identified as F13.
- One (1) raw material weight belt, identified as F16 (transfer points only).
- One (1) main belt #1, identified as F17 (transfer points only).
- One (1) enclosed CKD conveyor #1 (transfer points only).
- One (1) CKD storage silo, identified as EU48.
- One (1) enclosed CKD conveyor #2, identified as EU51 (transfer points only).

- One (1) enclosed pugmill, identified as EU49.
- One (1) main belt #2, identified as F18 (transfer points only).

(3) Until September 9, 2013, the above facilities in paragraph (b)(2) are subject to the rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) 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).

- 40 CFR 63.1340
- 40 CFR 63.1341
- 40 CFR 63.1342
- 40 CFR 63.1343 (a) and (b)
- 40 CFR 63.1344 (a), (b), (f), (g), and (h)
- 40 CFR 63.1345
- 40 CFR 63.1347
- 40 CFR 63.1348
- 40 CFR 63.1349 (a)
- 40 CFR 63.1349 (b)(1)(i), (b)(1)(ii), (b)(1)(iii), and (b)(1)(v)
- 40 CFR 63.1349 (b)(2)
- 40 CFR 63.1349 (b)(3)(i), (b)(3)(ii), (b)(3)(iii), and (b)(3)(iv)
- 40 CFR 63.1349 (c), (d), and (e)
- 40 CFR 63.1350 (a) and (b)
- 40 CFR 63.1350 (c)(1) and (c)(3)
- 40 CFR 63.1350 (d)(1) and (d)(3)
- 40 CFR 63.1350 (e), (f), (i), (j), (l), (m), (o), and (p)
- 40 CFR 63.1351 (a), (b), and (c)
- 40 CFR 63.1352
- 40 CFR 63.1353
- 40 CFR 63.1354 (a), (b)(1) through (b)(7), (b)(9)(i), (b)(9)(ii), (b)(9)(iv), (b)(9)(v), and (b)(10)
- 40 CFR 63.1355
- 40 CFR 63.1356 [excluding (a)(1) and (a)(2)]
- 40 CFR 63.1357
- 40 CFR 63.1358
- Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions

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

(c) The following is an analysis of the applicability of the rule requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) 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).

- (1) As a result of the amendments published in 75 FR 55051, on September 9, 2010, and in 76 FR 2835, on January 18, 2011, the following changes have been made to the affected source determinations made under the NESHAP.
- (A) Pursuant to 40 CFR 63.1340(b)(9) [75 FR 55051, Sept. 9, 2010], each open clinker pile is considered an affected source under the NESHAP.
- (B) The remainder of the applicability determination remains unchanged.
- (C) On and after September 9, 2013, the affected facilities in paragraph (b)(2), as well as any open clinker piles, are subject to the following requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) 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).
- 40 CFR 63.1340
 - 40 CFR 63.1341
 - 40 CFR 63.1342
 - 40 CFR 63.1343(a)
 - 40 CFR 63.1343 (b)(1) Table 1 - Rows 1, 2, 3, 4, 9, 10, 13, 14, 15, and 16
 - 40 CFR 63.1343 (c) and (d)
 - 40 CFR 63.1344
 - 40 CFR 63.1345
 - 40 CFR 63.1346 (a), (b), and (f)
 -
 - 40 CFR 63.1347
 - 40 CFR 63.1348 (a)(1), (a)(2), (a)(3)(i), (a)(3)(ii), (a)(4), (a)(5), and (a)(6)
 - 40 CFR 63.1348 (b), (c), and (d)
 - 40 CFR 63.1349 (a), (b)(1)(i), (b)(1)(ii), (b)(1)(iii), and (b)(2)
 - 40 CFR 63.1349 (b)(3)(i), (b)(3)(ii), (b)(3)(iii), and (b)(3)(iv)
 - 40 CFR 63.1349 (b)(4), (b)(5), (b)(6), (c), (d), and (e)
 - 40 CFR 63.1350 (a), (b), (d), (f), (g), (i), (j), (k), (l), (m), (n), (o), and (p)
 - 40 CFR 63.1351 (a), (b), and (c)
 - 40 CFR 63.1352
 - 40 CFR 63.1353
 - 40 CFR 63.1354
 - 40 CFR 63.1355
 - 40 CFR 63.1356
 - 40 CFR 63.1357
 - 40 CFR 63.1358

Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions

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

State Rule Applicability Determination

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Lehigh Cement Company LLC was in existence prior to 1971 (the source has operated under several different names since 1971). The source has been a major source under PSD upon promulgation of the Prevention of Significant Deterioration Program. The following determinations regarding PSD applicability have been made as part of prior permitting actions.

Construction Permits

The following tables show modifications made to this source, by year. The tables show the PTE for each facility and necessary emission limits to render the requirements of 326 IAC 2-2 (PSD) not applicable for each modification. There is a separate table for each modification. The facilities may be further limited by subsequent modifications.

1979 Pan Clinker Conveyor Modification				
Facility	PTE after Controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
pan clinker conveyor (EU29)	1.74	7.63	5.68	24.9
Totals	1.74	7.63	5.68	24.9

Note: PM₁₀ was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM₁₀ limit is necessary.

1984 Packing Machine Modification				
Facility	PTE after Controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
packing machine (EU47)	1.79	7.83	5.68	24.9
Totals	1.79	7.83	5.68	24.9

Note: PM₁₀ was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM₁₀ limit is necessary.

1987 Roll Crusher Modification				
Facility	PTE after Controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
roll crusher (EU31)	1.89	8.28	5.68	24.9
Totals	1.89	8.28	5.68	24.9

Note: PM₁₀ was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM₁₀ limit is necessary.

1989 Finish Mill #4 Separator Modification						
Facility	PTE after Controls		Limits necessary to render PSD not applicable			
	PM/PM ₁₀		PM		PM ₁₀	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
finish mill #4 separator (EU36)	6.69	29.30	5.68	24.9	3.40	14.9
Totals	6.69	29.30	5.68	24.9	3.40	14.9

Note: Since calculations indicate the finish mill #4 separator was not in compliance with these limits, stack testing was required to demonstrate compliance.

1993 Lime Bin Modification						
Facility	PTE after Controls		Limits necessary to render PSD not applicable			
	PM/PM ₁₀		PM		PM ₁₀	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
lime bin (EU38)	0.21	0.92	5.68	24.9	3.40	14.9
Totals	0.21	0.92	5.68	24.9	3.40	14.9

MSM 093-11313-00002

Minor Source Modification No. 093-11313-00002 (issued November 9, 1999) authorized the construction and operation of a cement kiln dust (CKD) moisture conditioning system and truck loadout to the existing plant. Upon issuance of MSM 093-11313-00002, a Part 70 permit had not been issued to Lehigh Cement Company LLC. The equipment was incorporated into the final Part 70 permit. Limitations were not imposed as part of this modification.

Part 70 Operating Permit No. 093-5990-00002

The source was issued Part 70 Operating Permit No. 093-5990-00002 on December 30, 2002. Upon further review of MSM 093-11313-00002, it was determined that limitations were necessary to ensure the emissions increase of PM and PM₁₀ from the modification was less than twenty-five (25) and fifteen (15) tons per year, respectively. The following limitations were incorporated as part of the Part 70 permitting action.

CKD moisture conditioning system and truck loadout Modification (MSM 093-11313-00002)						
Facility	PTE after Controls		Limits necessary to render PSD not applicable			
	PM/PM ₁₀		PM		PM ₁₀	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
CKD mixer (EU24B), CKD disposal/mining facilities (F05), and truck loadout (F07) (combined)	unknown	unknown	5.68	24.9	3.40	14.9
Totals	0.21	0.92	5.68	24.9	3.40	14.9

SSM 093-15822-00002 and SPM 093-16851-00002

Significant Source Modification No, 093-15822-00002 (issued June 24, 2003) authorized the conversion of Kilns #1 and #2 from long dry kilns to one-stage preheater kilns. Significant Permit Modification No, 093-16851-00002 (issued July 11, 2003) incorporated the source modification into Part 70 Operating Permit No. 093-5990-00002. The conversion was both a physical modification and a modification to the method of operation.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification, the following limitations were established.

Emission Unit	Potential Clinker Production (ton/yr)	NO _x (lb/ton Clinker)	CO (lb/ton Clinker)	SO ₂ (lb/ton Clinker)	VOC (lb/ton Clinker)	Lead (lb/ton Clinker)
Kiln #1	321,875	11.14	1.67	7.51	0.30	1.69E-03
Kiln #2	321.875	11.14	1.67	7.51	0.30	1.69E-03

Emission Unit	Production (tons/yr)	PM Emission Limitation (lbs/ton)	PM ₁₀ Emission Limitation (lbs/ton)
Kiln #1	321,875	0.28	0.59
Kiln #2	321,875	0.28	0.59

Controlled Emission Source	Operating Time Limit (hrs/yr)	PM/PM ₁₀ limit (lb/hr)	Equivalent PTE (tons/yr)
Primary Crusher (EU01) with BH	2,500	0.90	1.13
Quarry Surge Bin and Transfer System (EU02) with BH	2,500	0.90	1.13
Sec. Crusher (EU03) & Tertiary Crusher (EU04) with BH	2,500	1.44	1.80
N. Screen House (EU05) with BH	2,500	0.18	0.23
S. Screen House (EU06) with BH	2,500	1.44	1.80
Belt 7/8 Conveyor transfer point (EU07) with BH	2,500	0.44	0.55
Belt 8/9 conveyor transfer point (EU08) with BH	2,500	0.44	0.55
Belt #6 (EU09) with BH	2,500	0.27	0.34
Shale Crusher (EU10) with BH	2,500	1.44	1.80
Raw Mill #1 (EU11) with BH	8,760	4.51	19.75
Raw Mill #2 (EU12) with BH	8,760	4.51	19.75
Blending Bins (EU13) with BH (RMDC5)	8,760	1.06	4.64
Blending Bins (EU13) with BH (RMDC6)	8,760	0.53	2.32
Kiln Supply Silos (EU14) with BH (RMDC7)	8,760	1.06	4.64
Kiln Supply Silos (EU14) with BH (RMDC8)	8,760	0.53	2.32
Kiln #1 Feed Bin (EU18) with BH	8,760	0.97	4.25
Kiln #2 Feed Bin (EU20) with BH	8,760	0.97	4.25
Clinker Cooler #1 (EU19) with BH	8,760	11.41	49.98
Clinker Cooler #2 (EU21) with BH	8,760	11.41	49.98
Cement Kiln Dust Bin (EU24) with BH	8,760	0.89	3.90
CKD Truck uploading System (EU24A) with BH	8,760	0.36	1.58
Mixer (EU24B) with BH	8,760	0.54	2.37
S. Storage Drag (EU25) with BH	8,760	0.47	2.06
N. Clinker Tower (EU26A) with BH	1,500	1.76	1.32
S. Clinker Tower (EU27) with BH	8,760	1.68	7.36
Hot Spout Clinker Ladder (EU28) with BH	8,760	1.76	7.71

Controlled Emission Source	Operating Time Limit (hrs/yr)	PM/PM ₁₀ limit (lb/hr)	Equivalent PTE (tons/yr)
Pan Conveyor (EU29) with BH	8,760	1.70	7.45
E. Clinker Ladder (EU30) with BH	1,500	1.21	0.91
Roll Crusher (EU31) with BH	8,760	1.84	8.06
Finish Mill #1 (EU32) with BH	8,760	1.42	6.22
Finish Mill #2 (EU33) with BH	8,760	1.42	6.22
Finish Mill #3 (EU34) with BH	8,760	1.42	6.22
Finish Mill #4 (EU35) with BH	8,760	0.64	2.80
Finish Mill #4 Separator (EU36) with BH	8,760	3.27	14.32
Lime Bin (EU38) with BH	2,500	0.22	0.28
Finish Mill Surge Bin (EU37) with BH	1,500	0.49	0.37
N. Silo (EU39A) with BH	8,760	1.77	7.75
S. Silo (EU39B) with BH	8,760	1.77	7.75
Silo Transfer - East (EU40A) with BH	8,760	0.57	2.50
Silo Transfer - West (EU40B) with BH	8,760	0.57	2.50
E. Truck Loadout Bin (EU41)	8,760	0.43	1.88
W. Truck Loadout bin (EU43) with BH	8,760	0.43	1.88
E. Vacuolader (EU42) with BH	8,760	0.22	0.96
W. Vacuolader (EU44) with BH	8,760	0.22	0.96
Railroad Loadout Bin (EU45) with BH	2,000	0.71	0.71
Articulader (EU46) with BH	2,000	0.21	0.21
Packing Machine (EU47) with two (2) BHs	5,500 total	1.84 each baghouse	5.06 (only 1 baghouse can operate at a time)
Total Future PTE (tons/yr)			282.52

SSM 093-19158-00002 and SPM 093-18649-00002

Significant Source Modification No. 093-19158-00002 (issued November 5, 2004) and Significant Permit Modification No, 093-18649-00002 (issued November 5, 2004) authorized the construction and operation of a calcium sulfate material facility. The one (1) calcium sulfate material facility did not release a bottleneck nor potentially increase the utilization of other facilities at this source. The new pugmill handles materials from the existing CKD process, which did not increase potential capacity, or increase raw materials from the calcium sulfate material facility. Some of the calcium sulfate is processed in the finishing mills in place of other materials. Thus, calcium sulfate materials replaced other materials in the process and there was no increase in the capacity of existing facilities. Therefore, the only increase in the potential emissions resulted from the construction and operation of the new units.

The proposed calcium sulfate material facility was determined to be one project with the Kiln #1 and Kiln #2 conversion project (SSM 093-15822-00002). Therefore, the PM and PM₁₀ limitations established under SSM 093-15822-00002 were adjusted as part of SPM 093-18649-00002. These adjustments were necessary to ensure the PM and PM₁₀ emissions increase associated with the Kiln #1 and Kiln #2 project, in conjunction with the PM and PM₁₀ emissions from the calcium sulfate material facility, were limited to less than 25 tons per year of PM and 15 tons per year of PM₁₀.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification, the following limitations for the calcium sulfate facilities were established.

Emission Unit	Material Input Limit (tons/12 months)	PM Emission Limitation (lbs/ton)	PM ₁₀ Emission Limitation (lbs/ton)	Equivalent PM PTE (tons/yr)	Equivalent PM ₁₀ PTE (tons/yr)
Synthetic Gypsum and Raw Materials Storage Piles (F10 and F12)	50,000	0.0121	0.0057	0.30	0.14
Synthetic Gypsum Hopper (F11)	35,000	0.0121	0.0057	0.21	0.10
Synthetic Gypsum Weight Belt (F15)	35,000	0.0121	0.0057	0.21	0.10
Raw Material Hopper (F13)	15,000	0.0121	0.0057	0.09	0.04
Raw Material Weight Belt (F16)	15,000	0.0121	0.0057	0.09	0.04
Main Belt #1 (F17)	50,000	0.0121	0.0057	0.30	0.14
CKD silo (EU48)	35,000	0.0121	0.0057	0.21	0.10
Pugmill (EU49)	85,000	0.0121	0.0057	0.51	0.24
Main Belt #2 (F18)	85,000	0.0121	0.0057	0.51	0.24
Outdoor calcium sulfate material storage pile (F14)	85,000	0.0121	0.0057	0.51	0.24
Storage Building (resulting from previous limits)	85,000	0.0121	0.0057	0.51	0.24
Pile Movement (resulting from previous limits)	85,000	0.0121	0.0057	0.51	0.24
Storage	-	-	-	0.02	0.02
Totals:				4.01	1.91

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification (SSM 093-19158-00002), the Permittee requested changes to limitations accepted as part of SSM 093-15822-00002. The following illustrates changes to the limitations.

Controlled Emission Source	Operating Time Limit (hrs/yr)	PM/PM ₁₀ limit (lb/hr)	Equivalent PTE (tons/yr)
Primary Crusher (EU01) with BH	2,500	0.90 0.68	4.13 0.85
Quarry Surge Bin and Transfer System (EU02) with BH	2,500	0.90 0.50	4.13 0.63
Sec. Crusher (EU03) & Tertiary Crusher (EU04) with BH	2,500	4.44 0.72	4.80 0.90
N. Screen House (EU05) with BH	2,500	0.18	0.23
S. Screen House (EU06) with BH	2,500	4.44 0.79	4.80 0.99
Belt 7/8 Conveyor transfer point (EU07) with BH	2,500	0.44	0.55
Belt 8/9 conveyor transfer point (EU08) with BH	2,500	0.44	0.55
Belt #6 (EU09) with BH	2,500	0.27	0.34
Shale Crusher (EU10) with BH	2,500	1.44	1.80
Raw Mill #1 (EU11) with BH	8,760	4.51 3.50	19.8 15.33
Raw Mill #2 (EU12) with BH	8,760	4.51	19.75
Blending Bins (EU13) with BH (RMDC5)	8,760	1.06	4.64
Blending Bins (EU13) with BH (RMDC6)	8,760	0.53	2.32

Controlled Emission Source	Operating Time Limit (hrs/yr)	PM/PM ₁₀ limit (lb/hr)	Equivalent PTE (tons/yr)
Kiln Supply Silos (EU14) with BH (RMDC7)	8,760	1.06	4.64
Kiln Supply Silos (EU14) with BH (RMDC8)	8,760	0.53	2.32
Kiln #1 Feed Bin (EU18) with BH	8,760	0.97 0.49	4.25 2.15
Kiln #2 Feed Bin (EU20) with BH	8,760	0.97 0.49	4.25 2.15
Clinker Cooler #1 (EU19) with BH	8,760	11.41	49.98
Clinker Cooler #2 (EU21) with BH	8,760	11.41	49.98
Cement Kiln Dust Bin (EU24) with BH	8,760	0.89	3.90
CKD Truck uploading System (EU24A) with BH	8,760	0.36	1.58
Mixer (EU24B) with BH	8,760	0.54	2.37
S. Storage Drag (EU25) with BH	8,760	0.47	2.06
N. Clinker Tower (EU26A) with BH	4,500 8,760	1.76	4.32 7.71
S. Clinker Tower (EU27) with BH	8,760	1.68	7.36
Hot Spout Clinker Ladder (EU28) with BH	8,760	1.76	7.71
Pan Conveyor (EU29) with BH	8,760	4.70 0.85	7.45 3.72
E. Clinker Ladder (EU30) with BH	4,500 8,760	1.21	0.908 5.30
Roll Crusher (EU31) with BH	8,760	1.84	8.06
Finish Mill #1 (EU32) with BH	8,760	1.42	6.22
Finish Mill #2 (EU33) with BH	8,760	1.42	6.22
Finish Mill #3 (EU34) with BH	8,760	1.42	6.22
Finish Mill #4 (EU35) with BH	8,760	0.64	2.80
Finish Mill #4 Separator (EU36) with BH	8,760	3.27	14.32
Lime Bin (EU38) with BH	2,500	0.22	0.28
Finish Mill Surge Bin (EU37) with BH	1,500	0.49	0.37
N. Silo (EU39A) with BH	8,760	1.77	7.75
S. Silo (EU39B) with BH	8,760	1.77	7.75
Silo Transfer - East (EU40A) with BH	8,760	0.57	2.50
Silo Transfer - West (EU40B) with BH	8,760	0.57	2.50
E. Truck Loadout Bin (EU41)	8,760	0.43	1.88
W. Truck Loadout bin (EU43) with BH	8,760	0.43	1.88
E. Vaculoader (EU42) with BH	8,760	0.22	0.96
W. Vaculoader (EU44) with BH	8,760	0.22	0.96
Railroad Loadout Bin (EU45) with BH	2,000	0.71	0.71
Articuloader (EU46) with BH	2,000	0.21	0.21
Packing Machine (EU47) with two (2) BHs	5,500 total	4.84 0.92 each baghouse	5.06 2.53 (only 1 baghouse can operate at a time)
Total Future PTE	tons/yr		282.57 275.9

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The HAP emissions from kilns #1, #2, #3 are each greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to the kilns; however, pursuant to 326 IAC 2-4.1-1(b)(2), because these facilities are specifically regulated or exempted from regulation by the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing

Industry (40 CFR 63, Subpart LLL), which was issued pursuant to Section 112(d) of the CAA, these facilities are exempt from the requirements of 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This source has the potential to emit annual emissions greater or equal to two hundred fifty (250) tons per year of PM₁₀ and VOC. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 3-5-1 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5-1(c)(5), portland cement plants shall monitor the opacity at the following facilities: kilns, clinker coolers.

The source shall install, calibrate, and maintain a continuous monitoring system (COMS) for opacity for the following: kiln #1 (EU15) and kiln #2 (EU16) stack exhaust, identified as stack S-KP1; kiln #3 (EU17) stack exhaust, identified as stack S-KP2; clinker cooler #1 (EU19) stack exhaust, identified as stack S-KDC2; clinker cooler #2 (EU21) stack exhaust, identified as stack S-KDC4; and clinker cooler #3 (EU23) stack exhaust, identified as stack S-KDC6.

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

The definition of manufacturing process in 326 IAC 6-3-1.5(a)(2) is "any single or series of actions, operations, or treatments in which a mechanical, physical, or chemical transformation of material occurs that emits, or has the potential to emit, particulate in the production of the product. The term includes transference, conveyance, or repair of a product." As stated, this definition could lead to an interpretation that the manufacturing of portland cement from start to finish could be considered a process. However, the IDEM, OAQ has historically viewed processes as groups of equipment that are physically connected and perform a similar function (i.e. the storage or handling of material). In making the determination, the definition for process weight rate in 326 IAC 1-2-59 was relied upon when more than one interpretation could be made. The last paragraph of the definition states: "When the nature of any process or operation or the design of any is such as to permit more than one interpretation for this definition, the interpretation that results in the minimum value for allowable emission shall apply." The following determinations have been made in prior permitting actions or as part of this permitting action.

- (1) The quarry material sizing equipment, including the primary crusher (EU01), surge bin and transfer system (EU02), secondary crusher (EU03), tertiary crusher (EU04), north screen house (EU05), south screen house (EU06), and conveyor transfer points #7 to #8, #8 to #9 and #9 to #10 (EU07, EU08 and F02) were grouped together as one process because they operate in sequence, are dependent on each other and are used to accomplish one goal, being the sizing and preparation of the quarried material.
- (2) The cement kiln dust storage and handling (EU24, EU24A, and EU24B) were grouped together because they are operate in sequence, are dependent on each other.
- (3) The conveyor transfer system (EU09) was considered its own process because it operates independently and is not physically connected to any other of the other raw material sizing equipment.
- (4) The shale crusher (EU10) was considered its own process because it operates independently and is not physically connected to any other of the raw material sizing equipment.

- (5) Although the raw mills #1 (EU11 & EU11A) and #2 (EU12 & EU12A) perform similar functions, they operate independently to allow each mill to produce a slightly different milled raw material and are not physically connected to each other. Therefore, each raw mill was considered a separate process.
- (6) Although the Kiln #1 alternative fuel delivery system (F19) and the Kiln #2 alternative fuel delivery system (F20) perform similar functions, they operated independently to provide alternative fuel to separate kilns and are not physically connected to each other. Therefore, each alternative fuel delivery system was considered a separate process.
- (7) The raw mill's output is stored and prepared for charging to the kilns in various bins and silos including the blending bins (EU13), kiln supply silos (EU14) and kiln feed bins (EU18, EU20 and EU22). Each kiln feed bin (EU18, EU20, and EU22) operates independently to feed a separate kiln (Kiln #1, #2, and #3). Each kiln is operated separately and independently and is able to produce a slightly different grade of cement. Therefore, each kiln feed bin (EU18, EU20, and EU22) was considered a separate process. Blending bins (EU13) and the kiln supply silos (EU14) operate in sequence to accomplish one goal and are physically connected. Therefore, they were considered one process.
- (8) The clinker exiting the coolers is transferred to the finish mills via several conveyors and ladders, including the south storage drag (EU25), north clinker tower (EU26a) and north storage drag (EU26b), south clinker tower (EU27), and the pan conveyor (EU29). These facilities are distinct activities that are operated independently not sequentially. Therefore, they were considered separate processes.
- (9) The roll crusher (EU31) was considered its own process because it operates somewhat independently of the clinker handling equipment and performs a separate function which is to size the clinker.
- (10) Although the finish mills #1 through #4 (EU32, EU33, EU34 and EU35) perform similar functions, they are operated independently to allow each finish mill to produce a slightly different grade of cement and are not physically connected to each other. Therefore, they were considered separate processes. However the separator (EU36) and finish mill #4 (EU35) were grouped together because they are physically connected and do not operate independently.
- (11) The following facilities were determined to be considered separate processes; surge bin (EU37), north silo operations (EU39A), south silo operations (EU39B), silo transfers (EU40A), and silo transfers (EU40B).
- (12) The east truck loadout (EU41) and vaculoader (EU42) were grouped together as one process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to trucks.
- (13) The west truck loadout (EU43) and vaculoader (EU44) were also grouped together as one process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to trucks. However, they were not grouped with the east truck loadout and vaculoader because the east and west truck loadout systems can operate independently.
- (14) The railroad loadout (EU45) and articuloader (EU46) were grouped together as one process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to rail cars. However, they were not grouped with the east or west truck loadouts and vaculoaders because they can operate independently from the truck loadout systems.

- (15) The packing machine (EU47) was considered its own process because it is not physically connected to the other loadout facilities and it operates independently to perform a separate function.
- (16) The calcium sulfate material facilities (F11, F15, F13, F16, F17, and F18) were grouped together as one process because they operate dependently to accomplish the same goal and are physically connected.
- (17) The calcium sulfate material facilities (EU48 and EU49) were grouped together as one process because they operate dependently to accomplish the same goal and are physically connected. Although conveyors EU50 and EU51 are considered part of this process, EU50 and EU51 are enclosed screw auger conveyors. Therefore, EU50 and EU51 do not emit particulate and are not included in this 326 IAC 6-3-2 limit.

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) shall not exceed "E" pounds per hour when operating at a given process weight rate (tons per hour). The pound per hour limitations were calculated with the following equations:

- (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:

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

- (b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (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.

Cement Kilns and Clinker Coolers

Pursuant to 326 IAC 6-3-1(c)(6), this rule (326 IAC 6-3) shall not apply if a particulate limitation established in 326 IAC 20 is more stringent than the particulate limitation established in this rule (326 IAC 6-3).

Pursuant to 326 IAC 1-2-59 ("Process Weight; Weight Rate" Defined), process weight: the total weight of all materials introduced into any source operation. Solid fuels charged will be considered as part of the process weight but liquid and gaseous fuels and combustion air will not. Therefore, the process weight rate of the kilns will be equivalent to the feed dry basis rate. The source has supplied a factor of 1.55 tons of dry feed per ton of produced clinker.

- (a) Kiln #1 (EU15) and Kiln #2 (EU16)
Kiln #1 (EU15) and kiln #2 (EU16) are subject to 326 IAC 6-3-2(b) for cement kilns which commenced operation prior to December 6, 1968. The particulate limitation (E (lb/hr)) for a process weight above thirty (30) tons per hour shall be established in accordance with the following equation:

$$E = 15.0 P^{0.50} \quad \text{Where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons/hr.}$$

At a process weight rate of 59 tons/hr, each, the resulting E = 46 lbs/hr.

The kilns are subject to a particulate emission limitation established at 40 CFR 63.1343(b)(1) of ≤ 0.15 kg/Mg (0.30 lb per ton) of feed dry basis. At 59 tons/hr, the resulting allowable emissions are 18 lbs/hr, which is more stringent than 46 lbs/hr.

Therefore, the requirements of 326 IAC 6-3 do not apply to kiln #1 (EU15) and kiln #2 (EU16).

Kiln #3 (EU17)

Kiln #3 (EU17) is subject to 326 IAC 6-3-2(e) for which the particulate emission limitation (E) for a process weight rate above thirty (30) tons per hour shall be established in accordance with the following equation:

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

At a process rate weight of 67 tons per hour, the resulting E for kiln #3 (EU17) = 47 lbs/hr.

Kiln #3 (EU17) is subject to a particulate emission limitation established at 40 CFR 63.1343(b)(1) of ≤ 0.15 kg/Mg (0.30 lb per ton) of feed dry basis. At 67 tons per hour, the resulting allowable emissions are 20 lbs/hr, which is more stringent than 47 lbs/hr.

Therefore, the requirements of 326 IAC 6-3 do not apply to kiln #3 (EU17).

- (b) The clinker coolers are subject to 326 IAC 6-3-2(e) for which the particulate emission limitation (E) for a process weight rate above thirty (30) tons per hour shall be established in accordance with the following equation:

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

Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU21)

At a process weight rate of 38 tons/hr, each, the resulting limit for E is 42 lbs/hr. However, the clinker coolers are subject to a particulate emission limitation established at 40 CFR 63.1345 (a)(1) of 0.05 kg/Mg (0.10 lb/ton). At 38 tons per hour the resulting allowable emissions are 3.8 lbs/hr, which is more stringent than 42 lbs/hr.

Therefore, requirements of 326 IAC 6-3 do not apply to clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

Clinker Cooler #3 (EU23)

At a process weight rate of 43 tons/hr, the resulting E = 43 lbs/hr. However, the clinker cooler is subject to a particulate emission limitation established at 40 CFR 63.1345 (a)(1) of 0.05 kg/Mg (0.10 lb/ton). At 43 tons per hour the resulting allowable emissions are 4.3 lbs/hr, which is more stringent than 43 lbs/hr.

Therefore, requirements of 326 IAC 6-3 do not apply to clinker cooler #3 (EU23).

326 IAC 5-1 (Opacity Limitations)

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.

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

- (a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the sulfur dioxide (SO₂) emissions from the combustion of coal in kiln #1, kiln #2, and kiln #3 shall not exceed 6.0 pounds per million Btu (MMBtu) heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average sulfur dioxide emission rate in pounds per MMBtu.
- (b) The two (2) natural gas-fired burners in the raw mills #1 and #2 (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply.

326 IAC 7-2-1 (Sulfur Dioxide Compliance Reporting)

Pursuant to this rule, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the coal consumptions for each kiln. 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)]: 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; 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; Minimum sample size shall be five hundred (500) grams; Samples shall be composited and analyzed at the end of each calendar month; 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, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

Pursuant to 326 IAC 7-2-1(g), upon written notification of an emissions unit owner or operator to the department, continuous emissions monitoring data collected and reported under 326 IAC 3-5 may be used as the means for determining compliance with the emissions limitations in this article

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

All of the petroleum storage tanks at Lehigh Cement Company LLC have capacities less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 do not apply.

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

The gasoline dispensing facility at Lehigh Cement Company LLC was constructed prior to July 1, 1989, and has monthly gasoline throughputs of less than 10,000 gallons. Therefore, the requirements of 326 IAC 8-4-6 do not apply.

326 IAC 8-3-2 (Cold Cleaner Operation)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator 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.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following control equipment requirements are met for organic degreasing facilities without remote solvent reservoirs operations that do not exceed 145 gallons per 12 months:

- (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (1) 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 (38°C) (one hundred degrees Fahrenheit (100°F));
 - (2) the solvent is agitated; or
 - (3) the solvent is heated.
- (b) 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 (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (e) 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 (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
- (1) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (2) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (3) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

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

- (a) Close the cover whenever articles are not being handled in the degreaser.
- (b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (c) 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.

Compliance with 326 IAC 8-3-5 demonstrates compliance with 326 IAC 8-3-2.

326 IAC 10-3-3 (NO_x Emission Limitations)

Pursuant to 326 IAC 10-3-3, beginning on May 31, 2004, kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) shall not operate during the ozone control period of each year unless Lehigh Cement Company LLC complies with one (1) of the following:

- (1) Operation of the kiln with one (1) of the following:
 - (A) Low-NO_x burners.
 - (B) Mid-kiln firing.
- (2) A limit on the amount of NO_x emitted when averaged over the ozone control period as follows:
 - (A) For kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17), three and eight-tenths (3.8) pounds of NO_x per ton of clinker produced.
- (3) Installation and use of alternative control techniques that may include kiln system modifications, such as conversions to semi-dry precalciner kiln processing, subject to department and U.S. EPA approval that achieve a thirty percent (30%) emissions decrease from baseline ozone control period emissions. Baseline emissions shall be the average of the sum of ozone control period emissions for the two (2) highest emitting years from 1995 through 2000 determined in accordance with subsection (d)(1).

326 IAC 10-3-4 (NO_x Monitoring and Testing Requirements)

Pursuant to 326 IAC 10-3-4, beginning May 31, 2004, and each ozone control period thereafter, Lehigh Cement Company LLC shall comply with the following:

- (a) If complying with section 3(a)(1) of 326 IAC 10-3-3 shall operate and maintain the device according to a preventative maintenance plan prepared in accordance with 326 IAC 1-6-3.

326 IAC 10-3-5 (Record Keeping and Reporting)

Pursuant to 326 IAC 10-3-5:

- (a) Beginning May 31, 2004, and each ozone control period thereafter, Lehigh Cement Company LLC shall comply with the following record keeping and reporting requirements:
 - (1) If complying with section 3(a)(1) of 326 IAC 10-3 shall create and maintain records that include, but are not limited to, the following:
 - (A) All routine and nonroutine maintenance, repair, or replacement performed on the device or devices.
 - (B) The date, time, and duration of any startup, shutdown, or malfunction in the operation of a kiln or the device or devices.
- (b) Lehigh Cement Company LLC shall submit a report documenting that the total NOx emissions and the average NOx emission rate of the cement kilns for the ozone control period of each year to the department by October 31, beginning in 2004 and each year thereafter. For cement kilns complying with section 3(a)(1) of 326 IAC 10-3, estimated emissions and emission rate shall be determined in accordance with section 3(d) of 326 IAC 10-3 or from CEMS data, if a kiln is equipped with a CEMS as of the effective date of 326 IAC 10-3.
- (c) If complying with section 3(a)(1) of 326 IAC 10-3 Lehigh Cement Company LLC shall include a certification with the report under subsection (c) that the control technology was installed, operated, and maintained in accordance with 326 IAC 10-3.

Testing Requirements

Summary of Testing Requirements				
Emission Unit	Control Device	Frequency of Testing	Requirement	Limit (Pollutant)
raw mill #1 (EU11, which includes EU11A)	baghouse (RMDC3)	once every five (5) yrs	326 IAC 2-2	3.50 lb/hr (PM) 3.50 lb/hr (PM10)
			326 IAC 6-3-2	51.3 lb/hr (PM)
raw mill #2 (EU12, which includes EU12A)	baghouse (RMDC4)	once every five (5) yrs	326 IAC 2-2	4.51 lb/hr (PM) 4.51 lb/hr (PM10)
			326 IAC 6-3-2	51.3 lb/hr (PM)
finish mill #1 & assoc. feed bin (EU32)	baghouse (FDC8)	once every five (5) yrs	326 IAC 2-2	1.42 lb/hr (PM) 1.42 lb/hr (PM10)
			326 IAC 6-3-2	42 lb/hr (PM)
finish mill #2 & assoc. feed bin (EU33)	baghouse (FDC9)	once every five (5) yrs	326 IAC 2-2	1.42 lb/hr (PM) 1.42 lb/hr (PM10)
			326 IAC 6-3-2	42 lb/hr (PM)
finish mill #3 & assoc. feed bin (EU34)	baghouse (FDC10)	once every five (5) yrs	326 IAC 2-2	1.42 lb/hr (PM) 1.42 lb/hr (PM10)
			326 IAC 6-3-2	42 lb/hr (PM)

Summary of Testing Requirements				
Emission Unit	Control Device	Frequency of Testing	Requirement	Limit (Pollutant)
finish mill #4 & assc. feed bin (EU35)	baghouse (FDC11)	once every five (5) yrs	326 IAC 2-2	0.64 lb/hr (PM) 0.64 lb/hr (PM10)
finish mill #4 separator (EU36)	baghouse (FDC12)	once every five (5) yrs	326 IAC 2-2	3.27 lb/hr (PM) 3.27 lb/hr (PM10)
EU35 & EU36	FDC11/FCD12	once every five (5) yrs	326 IAC 6-3-2	45 lb/hr (PM) total
kiln #1 (EU15) kiln #2 (EU16)	kiln #1 is equipped with ESP (KP1) & a water spray tower kiln #2 is equipped with ESP (KP2) & a water spray towers	once every 2.5 yrs	326 IAC 2-2	0.28 lb/ton clinker (PM) (each)
				0.59 lb/ton clinker (PM10) (each)
				11.14 lb/ton clinker (NOx) (each)
				7.51 lb/ton clinker (SO2) (each)
				1.67 lb/ton clinker (CO) (each)
				0.30 lb/ton clinker (VOC) (each)
				1.69E-03 lb/ton clinker (Lead) (each)
				3.9E-02 lb/ton clinker (Sulfuric Acid Mist) (each)
0.037 lb/ton clinker (H2S) (each)				
clinker cooler #1 (EU19)	baghouse (KDC2)	once every 2.5 yrs	326 IAC 2-2	11.41 lb/hr (PM) 11.41 lb/hr (PM10)
clinker cooler #2 (EU21)	baghouse (KDC4)	once every 2.5 yrs	326 IAC 2-2	11.41 lb/hr (PM) 11.41 lb/hr (PM10)

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The Compliance Determination Requirements

- (a) Kiln #1 (EU15), kiln #2 (EU16), kiln #3 (EU17) have applicable Compliance Determination Requirements as follows:

SO₂ Emissions

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion in kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) 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:
- (i) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]: 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; 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; Minimum sample size shall be five hundred (500) grams; Samples shall be composited and analyzed at the end of each calendar month; 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);
 - ii) 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);
 - (ii) 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, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (A) or (B) above shall not be refuted by evidence of compliance pursuant to the other method.

- (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(g)]

Continuous Monitoring

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, a continuous 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.

Emission Controls Operation

The electrostatic precipitators (KP1) and (KP2), for particulate emissions control, shall be in operation and control particulate emissions whenever its associated kiln is in operation.

The spray towers for kiln #1 (EU15) and kiln #2 (EU16), for dioxins/furans control and SO₂ partial controlled, shall be in operation and control particulate emissions whenever its associated kiln is in operation.

These Compliance Determination Requirements for kiln #1 (EU15), kiln #2 (EU16), kiln #3 (EU17) are required to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) and 326 IAC 7-1.1 (SO₂ Emissions), and to render 326 IAC 2-2 (PSD) not applicable to kiln #1 (EU15) and kiln #2 (EU16).

- (b) Clinker cooler #1 (EU19), clinker cooler #2 (EU21), and clinker cooler #3 (EU23) have applicable Compliance Determination Requirements as follows:

Continuous Monitoring

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, a continuous monitoring system (COM) shall be installed, calibrated, maintained, and operated for measuring the opacity from each of the clinker coolers (EU19, EU21 and EU23), pursuant to 326 IAC 3-5-2.

Emission Controls Operation

The baghouses (KDC2) and (KDC4), for particulate emissions control, shall be in operation and control particulate emissions whenever its associated clinker cooler is in operation.

These Compliance Determination Requirements for clinker cooler #1 (EU19), clinker cooler #2 (EU21), and clinker cooler #3 (EU23) are required to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) and to render 326 IAC 2-2 (PSD) not applicable to clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

- (c) Baghouses/Dust Collectors have applicable Compliance Determination Requirements as follows:

Emission Controls Operation

All baghouses/dust collector stack exhausts, specifically listed in the permit, for which continuous opacity monitors are not used, for particulate emissions control, shall be in operation and control particulate emissions whenever its associated facility/process is in operation.

These Compliance Determination Requirements for are required to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD) not applicable.

The Compliance Monitoring Requirements

- (a) Kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) have applicable Compliance Monitoring Requirements as follows:

Maintenance of Continuous Opacity Monitoring (COM) Equipment

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.

- (1) 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.
- (2) 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.
- (3) Method 9 opacity readings may be discontinued once a COMS is online.
- (4) Any opacity exceedances determined by Method 9 opacity readings shall be reported in the Quarterly Opacity Exceedances Reports.

Compliance Assurance Monitoring (CAM) Plan

The Permittee shall comply with the EU15 and EU16 monitoring requirements for PM and PM₁₀ 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.

The Permittee shall comply with the EU15 and EU16 monitoring requirements for dioxin/furan 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.

These Compliance Monitoring Requirements are necessary because the ESPs and Spray Towers must operate properly at all times the associated facilities/processes are in operation to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) and 326 IAC 7-1.1 (SO₂ Emissions), and to render 326 IAC 2-2 (PSD) not applicable to kiln #1 (EU15) and kiln #2 (EU16).

- (b) Clinker cooler #1 (EU19), clinker cooler #2 (EU21), and clinker cooler #3 (EU23) have applicable Compliance Monitoring Requirements as follows:

Broken or Failed Bag Detection

The Permittee shall maintain the baghouses and replace broken or failed bags as needed.

Maintenance of Continuous Opacity Monitoring (COM) Equipment

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.

- (1) 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.
- (2) 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.

- (3) Method 9 opacity readings may be discontinued once a COMS is online.
- (4) Any opacity exceedances determined by Method 9 opacity readings shall be reported in the Quarterly Opacity Exceedances Reports.

Compliance Assurance Monitoring (CAM) Plan

The Permittee shall comply with EU19 and EU21 monitoring requirements for PM and PM₁₀ 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 clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

These Compliance Monitoring Requirements are necessary because the ESPs and Spray Towers must operate properly at all times the associated facilities/processes are in operation to ensure compliance with 326 IAC 3 (Continuous Emissions Monitoring) and 326 IAC 7-1.1 (SO₂ Emissions), and to render 326 IAC 2-2 (PSD) not applicable to clinker cooler #1 (EU19) and clinker cooler #2 (EU21).

- (c) Baghouses/Dust Collectors and the calcium sulfate material facilities/emission units have applicable Compliance Monitoring Requirements as follows:

Visible Emissions Notations

Visible emission notations of all baghouses/dust collector stack exhausts, specifically listed in the permit, for which continuous opacity monitors are not used, and the calcium sulfate material facilities/emission units (including the synthetic gypsum hopper (F11), synthetic gypsum weight belt (F15), raw material hopper (F13), raw material weight belt (F16), main belt #1 (F17), CKD storage silo (EU48), main belt #2 (F18), and all transfer points) shall be performed once per day during normal operations.

Parametric Monitoring

The Permittee shall record the pressure drop across all the baghouses/dust collector stack exhausts, specifically listed in the permit, for which continuous opacity monitors are not used, at least once per day when the associated facility/emission units are in operation.

Compliance with Visible Emissions Notations and Parametric Monitoring Requirements satisfies CAM 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), CKD mixer (EU24B), conveying system to transport raw material to storage (EU09), shale crusher (EU10), raw mill #1 (EU11), raw mill #2 (EU12), 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), articulader (EU46), packing machine (EU47), and baghouse (FDC2).

Broken or Failed Bag Detection

The Permittee shall maintain the baghouses and replace broken or failed bags as needed.

These Compliance Monitoring Requirements are necessary because the baghouses/dust collectors must operate properly at all times the associated facilities/processes are in operation to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD) not applicable.

Proposed Changes

The changes listed below are items that have changed or have been updated through this Title V permit renewal. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

IDEM Change 1:

To minimize future amendments to the issued Part 70 Permits, the OAQ is no longer including the name and/or title of the Responsible Official (RO) in Section A.1, General Information, of the permit. However, OAQ will still be evaluating if a change in RO meets the criteria specified in 326 IAC 2-7-1(34).

IDEM Change 2:

Several of IDEM's Branches and Sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

Additionally, all references to IDEM, OAQ's mailing address have been revised as follows:

Indiana Department of Environmental Management
Permits **Administration and Support Section** ~~Branch~~, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

IDEM Change 3:

All references to the IDEM, OAQ, Compliance Section telephone number have been revised as follows: ~~317-233-5674~~ **317-233-0178**.

All references to the IDEM, OAQ, Compliance Section facsimile number have been revised as follows: ~~317-233-5967~~ **317-233-6865**.

IDEM Change 4:

Some stakeholders feel that having general conditions that say "when required by a D section do YYY" and D conditions that say "do YYY in accordance with section C" creates two conditions to be in violation of for a single act. For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition."

IDEM Change 5:

The phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore all timelines have been switched to "no later than" or "not later than". The underlying rules for Title V fees, emergency provisions, continuous compliance plans, and revocation of permits state "within". Therefore, conditions regulated under these rules were not updated.

IDEM Change 6:

326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM is revising all instances of "the responsible official" to read "a responsible official."

IDEM Change 7:

IDEM has clarified what rule requirements a certification needs to meet. IDEM has removed the last sentence dealing with the need for certification from the forms because the Conditions requiring the forms already address this issue. Additionally, the statement at the bottom of the forms included with the permit stating whether a certification need accompany the form has been removed.

IDEM Change 8:

To clarify that Section B - Certification only states what a certification must be, IDEM has revised the condition.

IDEM Change 9:

To clarify the permit term and the term of the conditions, original Conditions B.2 – Permit Term, B.14 – Prior Permits Superseded, and B.17 – Permit Renewal have been modified. Additionally, a new Section B condition, B.3 – Term of Conditions has been added.

IDEM Change 10:

IDEM has rearranged the permit conditions such that original Condition B.4 – Termination of Right to Operate is now Condition B.14.

IDEM Change 11:

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of original Condition B.11 – Preventive Maintenance Plan and has amended original Condition B.12 – Emergency Provisions. IDEM has added a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans developed. IDEM has clarified other aspects of Section B - Preventive Maintenance Plan.

IDEM Change 12:

IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report. IDEM has added the Southeastern Regional Office to Section B - Emergency Provisions.

IDEM Change 13:

Having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviation form Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.

IDEM Change 14:

Upon further review, IDEM has removed (d) concerning nonroad engines from original Condition B.18 – Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

IDEM Change 15:

IDEM will state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.

IDEM Change 16:

IDEM will state that no notice is required for approved changes in Section B - Permit Revision Under Economic Incentives and Other Programs.

IDEM Change 17:

For clarification purposes, original Condition B.20 – Operational Flexibility has been revised.

IDEM Change 18:

IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

IDEM Change 19:

IDEM has revised Section C - Incineration to more closely reflect the two underlying rules. Additionally, the last sentence of original Condition C.4 – Incineration, was deleted because the provisions of 326 IAC 9-1-2 are federally enforceable and are included in Indiana's State Implementation Plan (SIP).

IDEM Change 20:

In order to avoid duplication of requirements which may be included in D sections, original Condition C.6 – Operation of Equipment has been removed from the permit.

IDEM Change 21:

IDEM has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.

IDEM Change 22:

IDEM has removed original Condition C.13 - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.

IDEM Change 23:

Upon further review, IDEM has determined that no additional monitoring will be required during COM downtime, until the COM has been down for twenty-four (24) hours. This allows the Permittee to focus on the task of repairing the COM during the first twenty-four (24) hour period. After twenty-four (24) hours of COM downtime, the Permittee will be required to conduct Method 9 readings for thirty (30) minutes. Once Method 9 readings are required to be performed, the readings should be performed twice per day at least 4 or 6 hours apart, rather than once every four (4) hours, until a COMS is back in service. Additionally, IDEM has removed the requirements

of Section C - Maintenance of Continuous Opacity Monitoring Equipment and added the requirements to the applicable D Sections of the permit.

IDEM Change 24:

The specifications of original Condition C.14 – Pressure Gauge and Other Instrument Specifications can only be practically applied to analog units. Therefore, IDEM has clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the language in original Condition C.14 has been revised. Section D conditions that refer to this condition have been revised to reflect the new condition title.

IDEM Change 25:

IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan (original Condition C.17). The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Therefore, original Condition C.17 for the "Compliance Response Plan" has been replaced by Condition C.17 for the "Response to Excursions or Exceedances". Section D conditions that refer to this condition have been revised to reflect the new condition title. IDEM has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.

IDEM Change 26:

IDEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.

IDEM Change 27:

Revisions were made to the Emission Statement condition (original Condition C.19) to incorporate the revisions to 326 IAC 2-6 that became effective March 27, 2004. The revised rule was

published in the April 1, 2004 Indiana Register. Paragraph (b) of Section C - Emission Statement has been removed. It was duplicative of the requirement in Section C - General Reporting Requirements.

IDEM Change 28:

The clean unit and pollution control project provisions of the U.S. EPA's New Source Review Reform Rules were vacated on June 24, 2005 by a United States Court of Appeals for the District of Columbia Circuit decision. The OAQ plans to remove the vacated provisions from 326 IAC 2 at the next state rulemaking opportunity. Paragraph (c) of Condition C.20, Record Keeping Requirements, has been revised to remove references to the clean unit provisions.

This decision also remanded the "reasonable possibility" standard back to U.S. EPA. On January 22, 2008 U.S. EPA promulgated a rule to address the remand, by the U.S. Court of Appeals for the District of Columbia on June 25, 2005, of the reasonable possibility provisions of the December 31, 2002 major NSR reform rule. IDEM has agreed, with U.S. EPA, to interpret "reasonable possibility" in 326 IAC 2-2 and 326 IAC 2-3 consistent with the January 22, 2008 U.S. EPA rule. To implement this interpretation, IDEM is revising Section C - General Record Keeping Requirements and Section C - General Reporting Requirements (original Conditions C.20 and C.21).

The voice of paragraph (b) of Section C - General Record Keeping Requirements has been change to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.

IDEM Change 29:

IDEM has simplified the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

IDEM Change 30:

IDEM will allow the Permittee the option of using manufacturer's recommendations for the calibration frequency. Original Conditions D.1.8, D.2.13, and D.3.12, which contained parametric monitoring instrumentation requirements, have been modified.

IDEM Change 31:

With regards to record keeping requirements for visible emission notations (and other parametric monitoring), the intent is that the Permittee needs to make a record of some sort every day. If there is a VE observation (or other parametric monitoring), the Permittee shall write down normal or abnormal. Additionally, if there is no VE observation (or other parametric monitoring), the Permittee will still need to make a record that day as to why a reading was not taken, such as the unit was not operating, or the unit was venting indoors that day, etc. In order to attempt to clarify the requirements, the recordkeeping requirements relating to the VEs and other daily parametric monitoring have been revised.

IDEM Change 32:

IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected. Section D conditions requiring control device inspections have been removed from the permit (original

Conditions D.1.9, D.2.14, D.3.13, D.4.13, and D.5.12). In addition, the associated requirements to keep records of the inspections have been removed.

IDEM Change 33:

Upon further review, IDEM has determined that once per day visible emission notations and once per day monitoring of the control device is generally sufficient to ensure proper operation of the emission units and control devices. Therefore, the monitoring frequency in original Conditions D.1.7, D.1.8, D.2.12, D.2.13, D.3.11, and D.3.12, has been changed from once per shift to once per day in the revised permit. In addition, the associated recordkeeping requirements have been revised.

IDEM Change 34:

Paragraph (a) of the Section D – Broken or Failed Baghouse conditions (original Conditions D.1.10, D.2.15, D.3.14, and, D.5.13) has been deleted and replaced with a condition specific to single compartment baghouses which control emissions from continuously operating processes.

Paragraph (b) of the Section D – Broken or Failed Baghouse conditions has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

IDEM Change 35:

For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. Therefore, a requirement has been added to the Section D – Particulate Control conditions (original Conditions D.1.5, D.2.10, D.3.9, D.4.9, and D.5.9) requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.

IDEM Change 36:

The word "status" has been added to Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this. The word "status" has been added to Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

IDEM Change 37:

IDEM, OAQ no longer incorporates the applicable requirements of 40 CFR 60 (NSPS) subparts or 40 CFR 63 (NESHAP) subparts into the D Sections of the permit. Instead, the applicable requirements are referenced by citation in Section E conditions of the permit, and the referenced subparts are included, in entirety, as attachments to the permit. Therefore, Section D conditions incorporating the applicable requirements under 40 CFR 60 and/or 40 CFR 63 have been deleted

from the permit (original Conditions D.2.2, D.2.3, D.2.9(a), D.2.9(c), D.2.11, D.2.16(d), D.2.17(a), D.2.17(b), D.3.3, D.3.4, D.3.8(a), D.3.10, D.3.15(d), D.3.16(a), D.3.16(b), D.4.3, D.4.4, D.4.7, D.4.12, D.4.16(d), D.4.17(b), D.4.17(c), D.4.17(d), D.4.17(e), D.4.17(f), D.5.3, D.5.4, D.5.6, D.5.10, D.5.15(d), D.5.16(b), D.5.16(c), D.5.16(d), D.5.16(e), D.7.1, D.7.2, D.7.6, D.7.9, D.7.11(a), and D.7.12). The following additions have been made to the permit:

- New Section E.1 references the applicable requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) by citation. 40 CFR 63, Subpart LLL is included in its entirety as Attachments A and B to the permit.

IDEM Change 38:

Section D - Determinations of Nonapplicability conditions (original Conditions D.1.2, D.2.6, D.3.5, D.5.2, and D.6.3), which contained determinations of nonapplicability under 40 CFR 60, 61 and/or 63 (NSPS and NESHAP programs) have been deleted from the D Sections of the permit. Additionally, original Conditions D.2.5 and D.3.2, which specified conditions under which NSPS and/or NESHAP requirements were determined to be nonapplicable has been deleted from the permit.

IDEM Change 39:

On July 15, 2008, the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}) was effective. Pursuant to this rule revision, IDEM will continue to evaluate condensable PM for NSR permits and set limits for filterable and condensable PM₁₀/ PM_{2.5}. However, IDEM will not require compliance demonstration until after the publication of a new or revised condensable test method (consistent with the "transition period" established by the U. S. EPA in this rulemaking). Original Conditions D.2.9, D.3.8, D.4.8, and D.5.7) have been revised to reflect this change.

IDEM Change 40:

Raw Mills EU11 and EU12 Facility Description

Raw mills EU11 and EU12 were constructed in 1961 with heat supplied to each raw mill via one (1) 37 million Btu per hour coal-fired stoker. Minor Source Modification No. 093-10597-00002 (issued on March 1, 1999) authorized the construction of a natural gas direct-fired burner unit for each raw mill. As part of the Part 70 Operating permit, the coal-fired stoker was identified as EU11B and EU12B, and the natural gas direct-fired burners were identified as EU11A and EU11B. This was necessary to identify what conditions were applicable to the different raw mill heat source configuration. Lehigh Cement Company LLC subsequently removed the coal-fired stoker. Therefore, it is no longer necessary to identify the natural gas direct-fired burners independently of the raw mills. Throughout the permit the source descriptions of the raw mills have been revised as follows:

- (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, identified as EU11A**, 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**, ~~identified as EU12A~~, 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.

IDEM Change 41:

Testing Requirements

The valid compliance tests for units EU03, EU04, and EU05, as required by original Condition D.1.6 - Testing Requirements, were performed December 3, 2003. Therefore, this requirement is no longer necessary and has been removed from the permit.

The initial valid compliance tests for units EU11, EU11A, EU12, and EU12A, as required by original Condition D.2.9 - Testing Requirements, were performed on December 11, 2003 and December 17, 2003. Therefore, original Condition D.2.9 has been revised to remove the initial compliance testing portion of the requirement.

The initial valid compliance tests for units EU32, EU33, EU34, EU35, and EU36, as required by original Condition D.3.8 - Testing Requirements, were performed on December 9, 2003 and December 18, 2003. Therefore, original Condition D.3.8 has been revised to remove the initial compliance testing portion of the requirement.

The initial valid compliance tests for units EU15 and EU16, as required by original Condition D.4.8 - Testing Requirements, were performed on March 15, 2004. Therefore, original Condition D.4.8 has been revised to remove the initial compliance testing portion of the requirement.

The initial valid compliance tests for units EU19 and EU21, as required by original Condition D.5.7 - Testing Requirements, were performed on December 12, 2003 and December 18, 2003. Therefore, original Condition D.5.7 has been revised to remove the initial compliance testing portion of the requirement.

IDEM Change 42:

New Condition D.4.12 - Compliance Assurance Monitoring (CAM), specifies that for kiln #1 (EU15) and kiln #2 (EU16), the Permittee shall comply with the monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry). Therefore, the source has submitted the following parametric monitoring conditions are no longer necessary. Since the PM limits in the NESHAP are more stringent than the PSD minor limits for kiln #1 and kiln #2, IDEM, OAQ has agreed. Additionally, there are no Part 70 PM or PM₁₀ limitations applicable to kiln #3 (EU17). The following Conditions have not been included in this Part 70 Operating Permit Renewal.

- Original Condition D.4.14 - Parametric Monitoring, which required monitoring of total power of ESPs KP1, KP2, and KP3, which control particulate emissions from kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17).
- Original Condition D.4.15 - Opacity Readings, which required response steps whenever the opacity at the kilns' stack exhausts exceeded 18 percent for three (3) consecutive six (6) minute averaging periods.

IDEM Change 43:

New Condition D.5.8 - Compliance Assurance Monitoring (CAM), specifies that for clinker cooler #1 (EU19) and clinker cooler #2 (EU21), the Permittee shall comply with the monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry). Therefore, the source has submitted the following parametric monitoring conditions are no longer necessary. Since the PM limits in the NESHAP are more stringent than the PSD minor limits for clinker cooler #1 and clinker cooler #2, IDEM, OAQ has agreed. Additionally, there are no Part 70 PM or PM₁₀ limitations applicable to clinker cooler #3 (EU23). The following Conditions have not been included in this Part 70 Operating Permit Renewal.

- Original Condition D.5.11 - Parametric Monitoring, which required pressure drop readings across each clinker cooler baghouse.
- Original Condition D.5.14 - Opacity Readings, which required response steps whenever the opacity at the clinker coolers' stack exhausts exceeded 18 percent for three (3) consecutive six (6) minute averaging periods.

IDEM Change 44:

The calcium sulfate material facilities/emission units, which are listed in Section D.6 (previously Section D.7) in the permit, includes the CKD storage silo, identified as EU48. Baghouse RMDC5, which controls particulate emissions from the CKD storage silo (EU48), also controls the blending bins, identified as EU13, which are permitted in Section D.3 of the permit. Since compliance determination and monitoring requirements for baghouse RMDC5 are already contained in Section D.3, they were not duplicated in Section D.6.

Conclusion and Recommendation

The operation of this Portland Cement Plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 093-24556-00002.

Appendix A: Emissions Calculations
Baghouse Summary
(page 1 of 3)

Company Name: Lehigh Cement Company LLC
Company Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Operating Permit Renewal No.: 093-24556-00002
Reviewer: Jenny Acker
Date: August 1, 2010

Operations		control device ID	Limited PTE					Flow Specifications		PTE Controlled		PTE (Uncontrolled)			
			Permitted hrs (hrs/yr)	PM Emissions (lb/hr)	PM10 Emissions (ton/yr)	PM Emissions (lb/hr)	PM10 Emissions (ton/yr)	(acfm)	(gr/dscf)	PM (lb/hr)	PM10 (lb/hr)	PM Emissions (lb/hr)	PM10 Emissions (ton/yr)	PM Emissions (lb/hr)	PM10 Emissions (ton/yr)
EU01	primary crusher	QDC2	2,500	0.68	0.85	0.68	0.85	5,000	0.015	0.64	0.64	642.86	2815.71	642.86	2815.71
EU02	quarry surge bin	QDC3	2,500	0.50	0.63	0.50	0.63	5,000	0.011	0.47	0.47	471.43	2064.86	471.43	2064.86
¹⁾ EU03	secondary crusher	QDC4	2,500	0.72	0.90	0.72	0.90	Testing Results Verified Limit				720.00	3153.60	720.00	3153.60
¹⁾ EU04	tertiary crusher	"	"	"	"	"	"	"				"	"	"	"
¹⁾ EU05	north screen house	QDC5	2,500	0.18	0.23	0.18	0.23	Testing Results Verified Limit				180.00	788.40	180.00	788.40
EU06	south screen house	QDC6	2,500	0.79	0.99	0.79	0.99	8,000	0.011	0.75	0.75	754.29	3303.77	754.29	3303.77
EU07	belt 7/8 conveyor transfer pt	QDC7	2,500	0.44	0.55	0.44	0.55	2,450	0.02	0.42	0.42	420.00	1839.60	420.00	1839.60
EU08	belt 8/9 conveyor transfer pt	QDC8	2,500	0.44	0.55	0.44	0.55	2,450	0.02	0.42	0.42	420.00	1839.60	420.00	1839.60
EU09	belt #6	RMDC1	2,500	0.27	0.34	0.27	0.34	1,500	0.02	0.26	0.26	257.14	1126.29	257.14	1126.29
EU10	shale crusher	RMDC2	2,500	1.44	1.80	1.44	1.80	8,000	0.02	1.37	1.37	1371.43	6006.86	1371.43	6006.86
¹⁾ EU11	raw mill #1	RMDC3	8,760	3.50	15.33	3.50	15.33	Testing Results Verified Limit				3500.00	15330.00	3500.00	15330.00
¹⁾ EU12	raw mill #2	RMDC4	8,760	4.51	19.75	4.51	19.75	Testing Results Verified Limit				4510.00	19753.80	4510.00	19753.80
EU13	blending bins	RMDC5	8,760	1.06	4.64	1.06	4.64	6,000	0.02	1.03	1.03	1028.57	4505.14	1028.57	4505.14
	blending bins	RMDC6	8,760	0.53	2.32	0.53	2.32	3,000	0.02	0.51	0.51	514.29	2252.57	514.29	2252.57
EU14	kiln supply silos or flyash storage	RMDC7	8,760	1.06	4.64	1.06	4.64	6,000	0.02	1.03	1.03	1028.57	4505.14	1028.57	4505.14
	kiln supply silos or flyash storage	RMDC8	8,760	0.53	2.32	0.53	2.32	3,000	0.02	0.51	0.51	514.29	2252.57	514.29	2252.57
EU18	kiln #1 feed bin	KCD1	8,760	0.49	2.15	0.49	2.15	5,500	0.01	0.47	0.47	471.43	2064.86	471.43	2064.86
¹⁾ EU19	clinker cooler #1	KCD2	8,760	11.41	49.98	11.41	49.98	Testing Results Verified Limit				11410.00	49975.80	11410.00	49975.80
EU20	kiln #2 feed bin	KCD3	8,760	0.49	2.15	0.49	2.15	5,500	0.01	0.47	0.47	471.43	2064.86	471.43	2064.86
¹⁾ EU21	clinker cooler #2	KCD4	8,760	11.41	49.98	11.41	49.98	Testing Results Verified Limit				11410.00	49975.80	11410.00	49975.80
EU22	kiln #3 feed bin	KDC5	8,760	n/a	n/a	n/a	n/a	6,000	0.01	0.51	0.51	514.29	2252.57	514.29	2252.57
¹⁾ EU23	clinker cooler #3	KCD6	8,760	n/a	n/a	n/a	n/a	Testing Results Verified Limit				3710.00	16249.80	7050.00	30879.00
²⁾ EU24	cement kiln dust bin	KCD7	8,760	0.89	3.90	0.89	3.90	5,330	0.02	0.89	0.89	913.71	4002.07	913.71	4002.07
EU24A	CKD truck unloading system	KCD7A	8,760	0.36	1.58	0.36	1.58	2,000	0.02	0.34	0.34	342.86	1501.71	342.86	1501.71
EU24B	Mixer	KCD7B	8,760	0.54	2.37	0.54	2.37	3,000	0.02	0.51	0.51	514.29	2252.57	514.29	2252.57
²⁾ EU25	south storage drag	FDC1	8,760	0.47	2.06	0.47	2.06	2,800	0.02	0.47	0.47	480.00	2102.40	480.00	2102.40
²⁾ EU26A	north clinker tower	FDC2	8,760	1.76	7.7088	1.76	7.71	10,500	0.02	1.76	1.76	1800.00	7884.00	1800.00	7884.00
²⁾ EU26B	north storage drag														
²⁾ EU26C	scrap bin clinker ladder														
²⁾ EU27	south clinker tower	FDC3	8,760	1.68	7.36	1.68	7.36	10,000	0.02	1.68	1.68	1714.29	7508.57	1714.29	7508.57
²⁾ EU28	hot spout clinker ladder	FDC4	8,760	1.76	7.71	1.76	7.71	10,500	0.02	1.76	1.76	1800.00	7884.00	1800.00	7884.00

Appendix A: Emissions Calculations
Baghouse Summary
 (page 2 of 3)

Operations		control device ID	Limited PTE					Flow		PTE Controlled		PTE (Uncontrolled)			
			Permitted hrs (hrs/yr)	PM Emissions (lb/hr)		PM10 Emissions (lb/hr)		Specifications (acfm) (gr/dscf)		PM (lb/hr)	PM10 (lb/hr)	PM Emissions (lb/hr)		PM10 Emissions (lb/hr)	
¹⁾ EU29	pan conveyor	FDC5	8,760	0.85	3.72	0.85	3.72	Testing Results Verified Limit				280.00	1226.40	360.00	1576.80
²⁾ EU30	east clinker ladder	FDC6	8,760	1.21	5.30	1.21	5.30	7,200	0.02	1.21	1.21	1234.29	5406.17	1234.29	5406.17
²⁾ EU31	roll crusher	FDC7	8,760	1.84	8.06	1.84	8.06	11,000	0.02	1.84	1.84	1885.71	8259.43	1885.71	8259.43
¹⁾ EU32	finish mill #1	FDC8	8,760	1.42	6.22	1.42	6.22	Testing Results Verified Limit				1420.00	6219.60	1420.00	6219.60
¹⁾ EU33	finish mill #2	FDC9	8,760	1.42	6.22	1.42	6.22	Testing Results Verified Limit				1420.00	6219.60	1420.00	6219.60
¹⁾ EU34	finish mill #3	FDC10	8,760	1.42	6.22	1.42	6.22	Testing Results Verified Limit				1420.00	6219.60	1420.00	6219.60
¹⁾ EU35	finish mill #4	FDC11	8,760	0.64	2.80	0.64	2.80	Testing Results Verified Limit				640.00	2803.20	640.00	2803.20
¹⁾ EU36	finish mill #4 separator	FDC12	8,760	3.27	14.32	3.27	14.32	Testing Results Verified Limit				3270.00	14322.60	3270.00	14322.60
EU37	finish mill surge bin	FDC13	1,500	0.49	0.37	0.49	0.37	2,800	0.02	0.48	0.48	480.00	2102.40	480.00	2102.40
EU38	lime bin	FDC14	2,500	0.22	0.28	0.22	0.28	1,200	0.02	0.21	0.21	205.71	901.03	205.71	901.03
EU39A	north silo	SDC1	8,760	1.77	7.75	1.77	7.75	10,000	0.02	1.71	1.71	1714.29	7508.57	1714.29	7508.57
EU39B	south silo	SDC2	8,760	1.77	7.75	1.77	7.75	10,000	0.02	1.71	1.71	1714.29	7508.57	1714.29	7508.57
EU40A	silo transfer - east	SDC3	8,760	0.57	2.50	0.57	2.50	3,200	0.02	0.55	0.55	548.57	2402.74	548.57	2402.74
EU40B	silo transfer - west	SDC4	8,760	0.57	2.50	0.57	2.50	3,200	0.02	0.55	0.55	548.57	2402.74	548.57	2402.74
EU41	east truck loadout bin	SDC5	8,760	0.43	1.88	0.43	1.88	2,440	0.02	0.42	0.42	418.29	1832.09	418.29	1832.09
EU42	east vacuolader	SDC6	8,760	0.22	0.96	0.22	0.96	1,240	0.02	0.21	0.21	212.57	931.06	212.57	931.06
EU43	west truck loadout bin	SDC7	8,760	0.43	1.88	0.43	1.88	2,440	0.02	0.42	0.42	418.29	1832.09	418.29	1832.09
EU44	west vacuolader	SDC8	8,760	0.22	0.96	0.22	0.96	1,240	0.02	0.21	0.21	212.57	931.06	212.57	931.06
EU45	railroad loadout bin	SDC9	2,000	0.71	0.71	0.71	0.71	4,000	0.02	0.69	0.69	685.71	3003.43	685.71	3003.43
EU46	articulader	SDC10	2,000	0.21	0.21	0.21	0.21	1,200	0.02	0.21	0.21	205.714286	901.03	205.71	901.03
¹⁾ EU47	packing machine	SDC11	5,500	0.92	2.53	0.92	2.53	Testing Results Verified Limit				920.00	4029.60	920.00	4029.60
"	"	SDC12	5,500	0.92	2.53	0.92	2.53	Testing Results Verified Limit				920.00	4029.60	920.00	4029.60

Methodology

Limited PTE (lb/hr) as specified in the permit

Limited PTE (tpy) = [Limited PM (lb/hr) or Limited PM10 (lb/hr)] x Permitted Hrs (hrs/yr) x 1/2000 lbs/ton

PTE Controlled PM/PM10 (lb/hr) = gr/dscf x scfm x 1/7000 (gr/lb) x 60 (min/hr)

²⁾ For these emission units the calculation was adjusted to account for standard operating conditions

PTE Controlled PMPM10 (lb/hr) = [gr/dscf x scfm x 1/7000 (gr/lb) x 60 (min/hr)] x [(68 °F + 460 °R) / (stack temp (120 °F) + 460 °R)] x [(stack pressure (407.5" Hg) + 29.92" Hg)/407.5"Hg]

PTE (Uncontrolled) PM/PM10 (lb/hr) = [gr/dscf x scfm x 1/7000 (gr/lb) x 60 (min/hr)] / (1 - control eff. of baghouse) where: Control efficiency (%) of each baghouse is 99.9%

¹⁾ for sources that have the limits verified by testing:

PTE (Uncontrolled) PM/PM10 (lb/hr) = [PM (lb/hr) or PM10 (lb/hr)] (limited in permit as verified by tested) / (1 - baghouse control eff.)

PTE (Uncontrolled) PM/PM10 (tpy) = PTE PM/PM10 (lb/hr) x 8760 hrs/yr x 1/2000 (ton/lb)

Appendix A: Emissions Calculations
Baghouse Summary
 (page 3 of 3)

$$\text{scfm} = \text{acfm} \times [(68 \text{ }^\circ\text{F} + 460 \text{ }^\circ\text{R}) / (\text{stack temp } ^\circ\text{F} + 460 \text{ }^\circ\text{R})]$$

¹⁾ These sources were tested and showed compliance with the limited PTE (lb/hr) as follows:

Operations		control device ID	Testing Date
Unit ID	Description		
¹⁾ EU03/EU04	secondary crusher	QDC4	12/10/2003
¹⁾ EU05	north screen house	QDC5	12/18/2003
¹⁾ EU11	raw mill #1	RMDC3	12/17/2003
¹⁾ EU12	raw mill #2	RMDC4	12/11/2003
¹⁾ EU19	clinker cooler #1	KCD2	5/23/2006
¹⁾ EU21	clinker cooler #2	KCD4	5/23/2006
¹⁾ EU23	clinker cooler #3	KCD6	12/9/2009
¹⁾ EU29	pan conveyor	FDC5	7/16/2002
¹⁾ EU32	finish mill #1	FDC8	12/8/2003
¹⁾ EU33	finish mill #2	FDC9	12/9/2003
¹⁾ EU34	finish mill #3	FDC10	12/9/2003
¹⁾ EU35	finish mill #4	FDC11	5/21/2004
¹⁾ EU36	finish mill #4 separator	FDC12	12/9/2003
¹⁾ EU47	packing machine	SDC11	7/16/2002
"	"	SDC12	7/17/2002

**Appendix A: Emissions Calculations
40 CFR 60, 61 & 63 Applicability Determinations**
(page 1 of 4)

Company Name: Lehigh Cement Company LLC
Company Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Operating Permit Renewal No.: 093-24556-00002
Reviewer: Jenny Acker
Date: August 1, 2010

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO	NSPS Subpart Y	NSPS Subpart F	NESHAP Subpart LLL	
						Applicable Until Sept. 09, 2013	Applicable On & After Sept. 09, 2013

Quarry activities

drilling/blasting, hauling, handling, storage	F01	prior to 1971	pre-dates rule	not an affected facility			
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Quarry Material Sizing Facilities/Emission Units

primary crusher	EU01	1965	pre-dates rule	not an affected facility			
surge bin and transfer system	EU02	1965	pre-dates rule	not an affected facility			
secondary crusher	EU03	1965	pre-dates rule	not an affected facility			
tertiary crusher	EU04	1965	pre-dates rule	not an affected facility			
north screen house	EU05	1965	pre-dates rule	not an affected facility			
south screen house	EU06	1965	pre-dates rule	not an affected facility			
belt #7 to belt #8 transfer point	EU07	1965	pre-dates rule	not an affected facility			
belt #8 to belt #9 transfer point	EU08	1965	pre-dates rule	not an affected facility			
belt #9 to belt #10 transfer point	F02	1965	pre-dates rule	not an affected facility			

Cement Kiln Dust Storage, Disposal, Mining, and Handling Facilities/Emission Units

cement kiln dust (CKD) bin	EU24	1959	not an affected facility				
CKD truck unloading system	EU24A	1959	not an affected facility				
CKD mixer	EU24B	1999	not an affected facility				
CKD truck loadout	F07	1999	not an affected facility				
CKD disposal & mining facilities	F05	1999	not an affected facility				

Raw Material Handling & Storage Facilities/Emission Units

conveying system to raw material to storage	EU09	1960	pre-dates rule	not an affected facility			
shale crusher	EU10	1961	pre-dates rule	not an affected facility			
material storage building	F03	1959-1960	not an affected facility	not an affected facility	pre-dates rule	YES	YES
coal unloading building	F08	1960	not an affected facility	pre-dates rule	not an affected facility	not an affected facility	not an affected facility
coal pile	F04	prior to 1971	not an affected facility	pre-dates rule	not an affected facility	not an affected facility	not an affected facility
raw material stockpiles	F09	prior to 1971	not an affected facility				

**Appendix A: Emissions Calculations
40 CFR 60, 61 & 63 Applicability Determinations**
(page 2 of 4)

Company Name: Lehigh Cement Company LLC
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Part 70 Operating Permit Renewal No.: 093-24556-00002
Reviewer: Jenny Acker
Date: August 1, 2010

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart 000	NSPS Subpart Y	NSPS Subpart F	NESHAP Subpart LLL	
						Applicable Until Sept. 09, 2013	Applicable On & After Sept. 09, 2013

Kiln #1 & Kiln #2 Alternative Fuel Delivery Systems

kiln #1 alternative fuel delivery system	F19	2006	not an affected facility	not an affected facility	** exempt	Transfer Points	Transfer Points
kiln #2 alternative fuel delivery system	F20	2006	not an affected facility	not an affected facility	** exempt	Transfer Points	Transfer Points

Raw Mill Facilities/Emission Units

raw mill #1	EU11	1961	not an affected facility	not an affected facility	pre-dates rule	YES	YES
raw mill #2	EU12	1961	not an affected facility	not an affected facility	pre-dates rule	YES	YES

Raw Mill Storage Facilities/Emission Units

blending bins	EU13	1961	not an affected facility	not an affected facility	pre-dates rule	YES	YES
kiln supply silos	EU14	1961	not an affected facility	not an affected facility	pre-dates rule	YES	YES
kiln feed bin #1	EU18	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
kiln feed bin #2	EU20	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
kiln feed bin #3	EU22	1974	not an affected facility	not an affected facility	** exempt	YES	YES

Clinker Handling Facilities/Emission Units

south storage drag	EU25	1974	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points
north clinker tower	EU26a	1959	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points
north storage drag	EU26b	1959	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points
scrap bin clinker ladder	EU26c	1993	not emission pts	not emission pts	not emission pts	not emission pts	not emission pts
south clinker tower	EU27	1974	not an affected facility	not an affected facility	** exempt	Transfer Points	Transfer Points
hot spout clinker ladder	EU28	1993	not emission pts	not emission pts	not emission pts	not emission pts	not emission pts
pan clinker conveyor	EU29	1979	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points
east clinker ladder	EU30	1993	not emission pts	not emission pts	not emission pts	not emission pts	not emission pts
roll crusher	EU31	1987	not an affected facility	not an affected facility	** exempt	YES	YES

Note: EU26c, EU28, EU30 are not emission units. They are flaps which are used to reduce the drop heights from EU26a, EU27, EU26b, respectively. Therefore, they are not subject to the requirements of any Subparts of 40 CFR 60 Part 60 or 40 CFR Part 63 listed in this analysis.

Finish Mill Facilities/Emission Units

finish mill #1	EU32	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
finish mill #2	EU33	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
finish mill #3	EU34	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
finish mill #4	EU35	1974	not an affected facility	not an affected facility	** exempt	YES	YES
finish mill #4 separator	EU36	1989	not an affected facility	not an affected facility	** exempt	YES	YES
lime bin	EU38	1993	not an affected facility	not an affected facility	** exempt	YES	YES

**Appendix A: Emissions Calculations
40 CFR 60, 61 & 63 Applicability Determinations**
(page 3 of 4)

Company Name: Lehigh Cement Company LLC
Company Address: 180 North Meridian Road, Mitchell, Indiana 47446
Part 70 Operating Permit Renewal No.: 093-24556-00002
Reviewer: Jenny Acker
Date: August 1, 2010

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart 000	NSPS Subpart Y	NSPS Subpart F	NESHAP Subpart LLL	
						Applicable Until Sept. 09, 2013	Applicable On & After Sept. 09, 2013

Finish Mill Storage Facilities/Emission Units

surge bin	EU37	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
north & south silo operation	EU39A	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
	EU39B	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
silo transfer system	EU40A	1959	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points
	EU40B	1959	not an affected facility	not an affected facility	pre-dates rule	Transfer Points	Transfer Points

Bulk Loading & Packaging Facilities/Emission Units

east truck loadout bin	EU41	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
east truck vacuolader	EU42	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
west truck loadout bin	EU43	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
west truck vacuolader	EU44	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
truck loadout station	F06	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
railroad loadout bin	EU45	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
articulader	EU46	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
packing machine	EU47	1984	not an affected facility	not an affected facility	** exempt	YES	YES

Kiln Facilities/Emission Units

kiln #1	EU15	modified 2003	not an affected facility	not an affected facility	** exempt	YES	YES
kiln #2	EU16	modified 2003	not an affected facility	not an affected facility	** exempt	YES	YES
kiln #3	EU17	1974	not an affected facility	not an affected facility	** exempt	YES	YES

Clinker Cooler Facilities/Emission Units

clinker cooler #1	EU19	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
clinker cooler #2	EU21	1959	not an affected facility	not an affected facility	pre-dates rule	YES	YES
clinker cooler #3	EU23	1974	not an affected facility	not an affected facility	** exempt	YES	YES

Calcium Sulfate Material Facilities/Emission Units

2 storage piles	F10	2004	not an affected facility				
	F12	2004					
synthetic gypsum hopper	F11	2004	* exempt	not an affected facility	** exempt	YES	YES
synthetic gypsum weight belt	F15	2004	* exempt	not an affected facility	** exempt	Transfer Points	Transfer Points
raw material hopper	F13	2004	* exempt	not an affected facility	** exempt	YES	YES
raw material weight belt	F16	2004	* exempt	not an affected facility	** exempt	Transfer Points	Transfer Points
main belt #1	F17	2004	* exempt	not an affected facility	** exempt	Transfer Points	Transfer Points
enclosed CKD conveyor #1	EU50	2004	not an affected facility	not an affected facility	not an affected facility	Transfer Points	Transfer Points
CKD storage silo	EU48	1961	pre-dates rule	not an affected facility	pre-dates rule	YES	YES
enclosed CKD conveyor #2	EU51	2004	not an affected facility	not an affected facility	not an affected facility	Transfer Points	Transfer Points
enclosed pugmill	EU49	2004	* exempt	not an affected facility	** exempt	YES	YES
main belt #2	F18	2004	* exempt	not an affected facility	** exempt	Transfer Points	Transfer Points
calcium sulfate storage pile	F14	2004	not an affected facility				

* Pursuant to 326 IAC 20-27, until September 9, 2013, these units are exempt from the requirements of 40 CFR 60, Subpart 000.

* Pursuant to 40 CFR 63.1356 [75 FR 55064, Sept. 9, 2010], on and after September 9, 2013, these units are exempt from the requirements of 40 CFR 60, Subpart 000.

** Pursuant to 40 CFR 60.62(d), these units are exempt from the requirements of 40 CFR 60, Subpart F, since they are subject to more stringent requirements under 40 CFR 63, Subpart LLL.

**Appendix A: Emissions Calculations
40 CFR 60, 61 & 63 Applicability Determinations**
(page 4 of 4)

Company Name: Lehigh Cement Company LLC
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Part 70 Operating Permit Renewal No.: 093-24556-00002
Reviewer: Jenny Acker
Date: August 1, 2010

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO	NSPS Subpart Y	NSPS Subpart F	NESHAP Subpart LLL	
						Applicable Until Sept. 09, 2013	Applicable On & After Sept. 09, 2013
Insignificant Activities							
coal mills #1 & #2	n/a	prior to 8/17/1971	not an affected facility	pre-dates	pre-dates	not an affected facility	not an affected facility
coal mills #3	n/a	1974	not an affected facility	pre-dates	pre-dates	not an affected facility	not an affected facility
¹⁾ coal feed conveyor	n/a	prior to 8/17/1971	not an affected facility	pre-dates	pre-dates	not an affected facility	not an affected facility
¹⁾ coal unloading conveyor	n/a	prior to 8/17/1971	not an affected facility	pre-dates	pre-dates	not an affected facility	not an affected facility

¹⁾ These emission units are not specifically listed in the permit, since there are no applicable requirements.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Debbie Tolliver
Lehigh Cement Company LLC
PO Box 97
Mitchell, IN 47446

DATE: March 7, 2012

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

SUBJECT: Final Decision
Part 70
093-24556-00002

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:
Edward E. Epping, Responsible Official
Jennifer Thompson, Attorney
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.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Mitchell Community Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Lehigh Cement Company LLC
Permit Number: 093-24556-00002

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 3/7/2012 Lehigh Cement Company LLC 093-24556-00002 (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	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Debbie Tolliver Lehigh Cement Company LLC P.O. Box 97 Mitchell IN 47446-0097 (Source CAATS) Confirm Delivery									
2		Edward E. Epping Plant Manager Lehigh Cement Company LLC 121 North First Street Mitchell IN 47446-0097 (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		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)									
7		Mitchell Community Public Library 804 Main Mitchell IN 47446 (Library)									
8		Ms. Michelle M. Cohen Brown County Solid Waste District 121 Locust Lane Nashville IN 47448 (Affected Party)									
9		Mr. Danny Arnold 374 Cedar View Ln. Bedford IN 47421 (Affected Party)									
10		Mr. David Weatherholt Boilermaker Local #374 4777 East County Road 2100 North Dale IN 47523 (Affected Party)									
11		Mr. Don Sherry 1111 215 St. Tell City IN 47506-2815 (Affected Party)									
12		Mr. David Reed RR 1 Box 157 Jasonville IN 47438 (Affected Party)									
13		Mitchell City Council and Mayors Office 407 S. 6th St. Mitchell IN 47446 (Local Official)									
14		Ms. Tawana Shiflet 110 E Grissom Ave Mitchell IN 47446 (Affected Party)									
15		Lawrence County Health Department 2419 Mitchell Rd. Bedford, IN 47421 (Health Department)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Mail Code 61-53

IDEM Staff	DPABST 3/7/2012 Lehigh Cement Company LLC 093-24556-00002 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Jennifer Thompson 2700 Market Tower 10 West Market Street Indianapolis IN 46204 (Attorney)										
2												
3												
4												
5												
6												
7												
8												
9												
10												
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Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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