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

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

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

November 5, 2004

TO: Interested Parties / Applicant

RE: Lehigh Cement Company / SSM 093-19158-00002

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, 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 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 9/16/03

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

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

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

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Lehigh Cement Company
121 North First Street
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.

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.: T093-5990-00002	
Original issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 30, 2002 Expiration Date: December 30, 2007

First Significant Permit Modification No. 093-16851-00002, issued on July 11, 2003

Second Significant Source Modification No.: 093-19158-00002	Conditions Affected: A.2 (ccc) and (ddd), A.2 (iii) through (ttt) has been added, B.13(a), B.24, C.7, C.11, C.20, D.1.1(b), D.1.3, D.1.5, D.2.3, D.2.7, D.2.8, D.3.4, D.3.6, D.3.8(b), D.3.9, D.3.15(e), D.4.4, D.4.5, D.4.7(b), D.4.10, D.4.11, D.4.16(c), (d), (e), and (f), D.4.17(g), D.5.4, D.5.7, and D.5.8; Facility Description Box in D.4; Facility Description Box in D.5; all of D.7 has been added; the Quarterly Report Forms for the North Clinker Tower (EU-26A) and the East Clinker Ladder (EU-30) have been removed; Ten (10) report forms for Section D.7 have been added; Condition B.25 has been added
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 5, 2004

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

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

The quarry activities, as follows:

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

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

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

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

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

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

(f) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.

(g) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.

(h) 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 PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.

(i) 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 PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.

(j) 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 PM emissions, and exhausting directly to the atmosphere.

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

(k) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.

(l) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.

(m) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(n) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

(o) CKD disposal and mining facilities, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw material handling and storage facilities/emissions units, as follows:

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

(q) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.

(r) 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.

(s) 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.

(t) One (1) coal pile, identified as F04, storage commencing prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

(u) 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.

The raw mill facilities/emissions units, as follows:

(v) 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-fired burner, identified as EU11A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.

(w) 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-fired burner, identified as EU12A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

The raw mill storage facilities/emissions units, as follows:

(x) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM 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.

(y) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM 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.

(z) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.

(aa) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.

(bb) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

(cc) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.

(dd) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(ee) One (1) North storage drag, identified as EU26b, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(ff) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(gg) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.

(hh) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.

(ii) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.

(jj) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.

(kk) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM 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.

The finish mill facilities/emissions units, as follows:

(ll) 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 PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.

(mm) 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 PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.

(nn) 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 PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.

(oo) 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 PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.

(pp) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.

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

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

(rr) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.

(ss) 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 PM 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.

(tt) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM 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.

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

(uu) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal

rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.

(vv) One (1) east truck vaculoader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.

(ww) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.

(xx) One (1) west truck vaculoader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.

(yy) 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.

(zz) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.

(aaa) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.

(bbb) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM 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.

The kiln facilities/emissions units, as follows:

(ccc) 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and dioxins/ furans controlled and SO_2 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.

(ddd) 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and dioxins/ furans controlled and SO_2 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.

(eee) 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 PM 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 clinker cooler facilities/emissions units, as follows:

(fff) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.

(ggg) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.

(hhh) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

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

(iii) Two (2) storage piles, identified as F10 and F12, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.

(jjj) One (1) synthetic gypsum hopper, identified as F11, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(kkk) One (1) synthetic gypsum weight belt, identified as F15, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(lll) One (1) raw material hopper, identified as F13, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(mmm) One (1) raw material weight belt, identified as F16, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(nnn) One (1) main belt #1, identified as F17, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ooo) One (1) enclosed CKD conveyor #1, identified as EU50, maximum throughput: 50 tons per hour.

(ppp) One (1) CKD storage silo, identified as EU48, 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.

(qqq) One (1) enclosed CKD conveyor #2, identified as EU51, maximum throughput: 50 tons per hour.

(rrr) One (1) enclosed pugmill, identified as EU49, maximum capacity: 100 tons per hour.

(sss) One (1) main belt #2, identified as F18, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ttt) One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, potential capacity: 0.10 acre.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The term "applicable requirements" shall have the meaning set forth in 326 IAC 2-7-1(6). 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) From the effective date of this permit, the Permittee's right to operate this source is pursuant to this Title V permit. All previously issued operating permits, including those listed below, are superseded by this permit. All operating permits that are currently in effect are hereby revoked by the issuance of this Title V Permit and are no longer in effect.

(1) OP 47-01-88-0072, issued on May 30, 1984;
(2) OP 47-01-88-0073, issued on May 30, 1984;
(3) OP 47-01-88-0074, issued on May 30, 1984;
(4) OP 47-01-88-0075, issued on May 30, 1984;
(5) OP 47-01-88-0076, issued on May 30, 1984;
(6) OP 47-01-88-0077, issued on May 30, 1984;
(7) OP 47-01-88-0078, issued on May 30, 1984;
(8) OP 47-01-88-0079, issued on May 30, 1984;
(9) OP 47-01-88-0080, issued on May 30, 1984;
(10) OP 47-01-92-0097, issued on July 22, 1987; and
(11) OP 47-04-92-0099, issued on March 30, 1988.

(c) Construction Permit CP093-4598-00002, issued on February 27, 1998, which allowed the source to burn waste tires as a fuel in their kilns, has been revoked. Subsequent amendments and modifications to that permit including A093-9623 issued April 29, 1998, 093-11248 issued September 9, 1999, and 093-11552 issued October 23, 2000 have also been revoked. The source is no longer permitted to burn waste tires.

(d) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following nonapplicability determinations regarding this source:

(1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 326 IAC 12 and 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.

(2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as

volatile organic liquid (VOL).

(3) The quarry activities, the quarry material sizing facilities/emission units, and the raw material handling and storage facilities/emission units 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.

(4) 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 this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).

(5) 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.

(6) Paragraphs #2 through #7 of exemption CP 093-9431-00002, issued August 19, 1999, list requirements pursuant to Indiana Solid Waste Regulations, 326 IAC 10 and 326 IAC 11. IDEM has not included these requirements in the Part 70 permit because IDEM, OAQ has determined that these conditions are not applicable requirements as defined by 326 IAC 2-7-1(6).

(e) 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.

(f) 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.

(g) 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.

(h) 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).

(i) 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)]

(j) 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)(7)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 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.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports, and support information required by this Permit, including any record keeping required by the Preventive Maintenance Plan, shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

D.1.1 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.

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:

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

(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 limitation was 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:

$E = 55.0\ P^{0.11} – 40$ where: E = rate of emission in pounds per hour
P =process weight rate in tons per hour

D.1.3 Prevention of Significant Deterioration (PSD) [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, and in order to render the requirements of PSD not applicable, 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 PM_{10} 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.

These limitations will result in PM and PM_{10} emissions of less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

(b) Pursuant to Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

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

(2) PM and PM_{10} emissions from baghouse QDC2 controlling the Primary Crusher (EU01) shall each not exceed 0.68 pounds per hour.

(3) PM and PM_{10} emissions from baghouse QDC3 controlling the Quarry Surge Bin and Transfer System (EU02) shall each not exceed 0.50 pounds per hour.

(4) PM and PM_{10} emissions from baghouse QDC7 controlling Belt #7 to Belt #8 Conveyor Transfer Point (EU07) shall each not exceed 0.44 pounds per hour.

(5) PM and PM_{10} emissions from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08) shall each not exceed 0.44 pounds per hour.

(6) PM and PM_{10} emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) shall each not exceed 0.72 pounds per hour.

(7) PM and PM_{10} emissions from baghouse QDC6 controlling the South Screen House (EU06) shall each not exceed 0.79 pounds per hour.

(8) PM and PM_{10} emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.

(9) PM and PM_{10} emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.

(10) PM and PM_{10} emissions from baghouse KDC7A controlling the CKD Truck Unloading System (EU24A) shall each not exceed 0.36 pounds per hour.

(11) PM and PM_{10} emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

These limits ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

D.1.5 Particulate Control

Pursuant to minor source modification 093-11313 issued November 9, 1999, for the CKD mixer (EU24B), and in order for all units to comply with Conditions D.1.1 and D.1.3, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation.

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) shall each not exceed ten percent (10%) opacity.

D.2.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

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

(b) PM and PM_{10} emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.

(c) PM and PM_{10} emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.

(d) PM and PM_{10} emissions from baghouse RMDC3 controlling Raw Mill #1 (EU11) shall each not exceed 3.50 pounds per hour.

(e) PM and PM_{10} emissions from baghouse RMDC4 controlling Raw Mill #2 (EU12) shall each not exceed 4.51 pounds per hour.

These limits ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.2.11 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

D.3.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36, and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) shall not exceed ten percent (10%) opacity.

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) In order to render the requirements of PSD not applicable, to the Permittee's: 1979 pan clinker conveyor modification; 1984 packing machine modification; 1987 roll crusher modification; 1989 finish mill #4 separator modification; and 1993 lime bin modification, respectively, the following conditions shall apply:

(1) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.

(2) The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.

(3) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.

(4) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.

(5) The PM_{10} emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.

(6) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.

(7) The PM_{10} emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increases from the modifications above do not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable.

(b) Pursuant to Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

(1) PM and PM_{10} emissions from Blending Bins (EU13) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC5 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC6.

(2) PM and PM_{10} emissions from Kiln Supply Silos (EU14) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC7 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC8.

(3) PM and PM_{10} emissions from baghouse KDC1 controlling Kiln #1 Feed Bin (EU18) shall each not exceed 0.49 pounds per hour.

(4) PM and PM_{10} emissions from baghouse KDC3 controlling Kiln #2 Feed Bin (EU20) shall each not exceed 0.49 pounds per hour.

(5) PM and PM_{10} emissions from baghouse FDC1 controlling South Storage Drag (EU25) shall each not exceed 0.47 pounds per hour.

(6) The Finish Mill Surge Bin (EU37) shall be limited to 1,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(7) PM and PM_{10} emissions from baghouse FDC2 controlling North Clinker Tower (EU26A) shall each not exceed 1.76 pounds per hour.

(8) PM and PM_{10} emissions from baghouse FDC3 controlling South Clinker Tower (EU27) shall each not exceed 1.68 pounds per hour.

(9) PM and PM_{10} emissions from baghouse FDC4 controlling Hot Spout Clinker Ladder (EU28) shall each not exceed 1.76 pounds per hour.

(10) PM and PM_{10} emissions from baghouse FDC5 controlling Pan Conveyor (EU29) shall each not exceed 0.85 pounds per hour.

(11) PM and PM_{10} emissions from baghouse FDC6 controlling East Clinker Ladder (EU30) shall each not exceed 1.21 pounds per hour.

(12) PM and PM_{10} emissions from baghouse FDC7 controlling Roll Crusher (EU31) shall each not exceed 1.84 pounds per hour.

(13) PM and PM_{10} emissions from baghouse FDC8, controlling Finish Mill #1 (EU32), shall each not exceed 1.42 pounds per hour.

(14) PM and PM_{10} emissions from baghouse FDC9 controlling Finish Mill #2 (EU33) shall each not exceed 1.42 pounds per hour.

(15) PM and PM_{10} emissions from baghouse FDC10 controlling Finish Mill #3 (EU34) shall each not exceed 1.42 pounds per hour.

(16) PM and PM_{10} emissions from baghouse FDC11 controlling Finish Mill #4 (EU35) shall each not exceed 0.64 pounds per hour.

(17) PM and PM_{10} emissions from baghouse FDC12 controlling Finish Mill #4 Separator (EU36) shall each not exceed 3.27 pounds per hour.

(18) The Lime Bin (EU38) shall be limited 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(19) PM and PM_{10} emissions from baghouse FDC14 controlling Lime Bin (EU38) shall each not exceed 0.22 pounds per hour.

(20) PM and PM_{10} emissions from baghouse FDC13 controlling Finish Mill Surge Bin (EU37) shall each not exceed 0.49 pounds per hour.

(21) PM and PM_{10} emissions from baghouse SDC1 controlling North Silo Operation (EU39A) shall each not exceed 1.77 pounds per hour.

(22) PM and PM_{10} emissions from baghouse SDC2 controlling South Silo Operation (EU39B) shall each not exceed 1.77 pounds per hour.

(23) PM and PM_{10} emissions from baghouse SDC3 controlling Silo Transfer - East (EU40A) shall each not exceed 0.57 pounds per hour.

(24) PM and PM_{10} emissions from baghouse SDC4 controlling Silo Transfer - West (EU40B) shall each not exceed 0.57 pounds per hour.

(25) PM and PM_{10} emissions from baghouse SDC5 controlling East Truck Loadout Bin (EU41) shall each not exceed 0.43 pounds per hour.

(26) PM and PM_{10} emissions from baghouse SDC7 controlling West Truck Loadout Bin (EU43) shall each not exceed 0.43 pounds per hour.

(27) PM and PM_{10} emissions from baghouse SDC6 controlling East Vaculoader (EU42) shall each not exceed 0.22 pounds per hour.

(28) PM and PM_{10} emissions from baghouse SDC8 controlling West Vaculoader (EU44) shall each not exceed 0.22 pounds per hour.

(29) The Railroad Loadout Bin (EU45) and the Articuloader (EU46) shall be limited to 2,000 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(30) PM and PM_{10} emissions from baghouse SDC9 controlling Railroad Loadout Bin (EU45) shall each not exceed 0.71 pounds per hour.

(31) PM and PM_{10} emissions from baghouse SDC10 controlling Articuloader (EU46) shall each not exceed 0.21 pounds per hour.

(32) The Packing Machine (EU47) shall be limited to 5,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(33) PM and PM_{10} emissions from baghouse SDC11 and baghouse SDC12 controlling Packing Machine (EU14) shall each not exceed 0.92 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093- 18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]

(a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition D.3.4 by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

(b) Within 60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2, in order to demonstrate compliance with Condition D.3.1(k), (l), (m), (n), and D.3.6, the Permittee shall perform PM and PM_{10} 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). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.3.9 Particulate Control

Pursuant to CP093-2770 issued March 3, 1993, for the three clinker ladders (EU26c, EU28 and EU30 and the lime bin (EU38), and in order for all units to comply with Conditions D.3.1, D.3.4 and D.3.6, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation.

D.3.15 Record Keeping Requirements

(a) To document compliance with Condition D.3.11, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units

(EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) once per day and all other baghouse stack exhausts once per shift.

(b) To document compliance with Condition D.3.12, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) once per day and all other baghouses once per shift.

(c) To document compliance with Condition D.3.13, the Permittee shall maintain records of the results of the inspections required under Condition D.3.13.

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a), recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(e) To document compliance with Condition D.3.6(b)(5), (15), (22) and (25), 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.

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

SECTION D.4 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and dioxins/furans controlled and SO_2 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.

(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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and dioxins/furans controlled and SO_2 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.

(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 PM 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.)

D.4.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1343 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) shall be limited as follows:

(a) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln.

(b) Visible emissions shall be limited to twenty percent (20%) opacity.

(c) Dioxin/Furan emissions shall be limited to 8.7×10^{-11} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen; or 1.7×10^{-10} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or less.

(d) The kiln shall be operated such that the three hour rolling average temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.4.7.

D.4.5 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

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 SO_2 is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions D.4.1 and D.4.2. A CAM plan was received from the source on December 19, 2002. IDEM has determined that compliance with the monitoring requirements of 40 CFR 63.8 and 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfy the monitoring requirements of 40 CFR 64.

D.4.7 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

(a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM shall be repeated at least once every five 5 years and the tests for dioxin/furans shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test that may adversely affect compliance with the applicable particulate matter or dioxins/furans limits. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.

(b) Pursuant to 40 CFR 63.1349, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of startup of preheater Kilns #1 and #2.

D.4.10 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [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, 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)]

326 IAC 3-5, 326 IAC 3-6 and 326 IAC 3-7 are not federally enforceable.

D.4.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from the stacks associated with each of the kilns (S-KP1 and S-KP2), pursuant to 326 IAC 3-5-2 and 40 CFR 63.8(c). The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Condition D.4.7. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

326 IAC 3-5 is not federally enforceable.

D.4.16 Record Keeping Requirements

(a) In order to document compliance with Conditions D.4.2 and D.4.10, 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 SO_2 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.

326 IAC 7-1.1, 7-2-1, and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

(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 compliance with Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.13, D.4.14, and D.4.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.13, D.4.14, and D.4.15.

(1) Data and results from the most recent stack test.

(2) All continuous emissions monitoring data.

(3) All ESP total power readings.

(4) The results of all ESP inspections and the type and number of parts replaced.

(5) All preventive maintenance measures taken.

(6) All response steps taken and the outcome for each.

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).

(4) The Permittee shall keep records of the results of the inspections of the components of the combustion systems of kilns #1, #2, and #3, required by 40 CFR 63.1350 and Condition D.4.12(b), at least once per year.

(e) To document compliance with 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.

(f) To document compliance with Condition D.4.1(a), the Permittee shall maintain records of the Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16).

(g) All records shall be maintained in accordance with Section C - General Record Keeping

Requirements, of this permit.

D.4.17 Reporting Requirements

(a) A quarterly summary of the information to document compliance with the SO_2 limit specified in Condition D.4.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. This report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63, Subpart A.

(c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:

(1) All exceedances of maximum control device inlet gas temperature limits specified in Condition D.4.4.

(2) All failures to verify the calibration of the thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(6).

(3) The results of any combustion system component inspections conducted within the reporting period as required by Condition D.4.12(b).

(4) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.

(d) To document compliance with the NESHAP, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

(1) The plan required by Condition D.4.12 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.

(2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.

(3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee 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 40 CFR 63.6(e)(3), the Permittee 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.

(5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee 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 Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, 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.

(e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(f) To document compliance with the reporting requirements in 40 CFR 64.9(a)(2), the permittee shall report the information required by this rule, including but not limited to:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions and 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)

(g) A quarterly summary of the information to document compliance with Condition D.4.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

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 PM 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 PM 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 PM 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.)

D.5.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1345 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, each clinker cooler (EU19, EU21 and EU23) shall be limited as follows:

(a) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.

(b) Visible emissions shall be limited to ten percent (10%) opacity.

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall demonstrate compliance with the PM and PM_{10} limits established in condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2, by conducting performance tests for PM and PM_{10} from Clinker Cooler #1 and Clinker Cooler #2, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. These PM and PM_{10} tests shall be conducted every 2.5 years. PM_{10} includes filterable and condensible PM_{10}.

D.5.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). 326 IAC 3-5 is not federally enforceable.

(b) The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

SECTION D.7 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

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

(iii) Two (2) storage piles, identified as F10 and F12, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.

(jjj) One (1) synthetic gypsum hopper, identified as F11, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(kkk) One (1) synthetic gypsum weight belt, identified as F15, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(lll) One (1) raw material hopper, identified as F13, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(mmm) One (1) raw material weight belt, identified as F16, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(nnn) One (1) main belt #1, identified as F17, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ooo) One (1) enclosed CKD conveyor #1, identified as EU50, maximum throughput: 50 tons per hour.

(ppp) One (1) CKD storage silo, identified as EU48, 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.

(qqq) One (1) enclosed CKD conveyor #2, identified as EU51, maximum throughput: 50 tons per hour.

(rrr) One (1) enclosed pugmill, identified as EU49, maximum capacity: 100 tons per hour.

(sss) One (1) main belt #2, identified as F18, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ttt) 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.7.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the following calcium sulfate material facilities/emission units except when otherwise specified in 40 CFR Part 63, Subpart LLL: one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1)

raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18).

D.7.2 NESHAP Emissions Limitation [326 IAC 20-27] [40 CFR 63.1348]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), the visible emissions from the following calcium sulfate material facilities/emission units shall each not exceed ten percent (10%) opacity: one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18).

D.7.3 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 the calcium sulfate material facilities/emission units 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:

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

D.7.4 PSD Minor Limit [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-18649-00002, issued in 2004, the following conditions shall apply upon issuance:

(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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(h) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(i) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(j) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

These limits will ensure that the PM and PM_{10} emissions increase from the modifications permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.7.6 NESHAP Testing Requirements [326 IAC 20-27] [40 CFR 63.1349]

Within 180 days after startup of the one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), the Permittee shall demonstrate initial compliance with the opacity limits established in Condition D.7.2 by conducting performance tests in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A.

D.7.7 Particulate Control

In order to comply with condition D.7.3, the baghouse for particulate control shall be in operation and control emissions from the CKD storage silo, identified as EU48, at all times that the CKD storage silo is in operation.

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

D.7.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

All monitoring and record keeping requirements in this section shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

D.7.9 NESHAP Monitoring Requirements [326 IAC 20-27] [40 CFR 63.1350]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the following calcium sulfate material facilities/emission units: the one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), upon startup. The plan shall include the following information:

(a) Procedures for proper operation and maintenance of the affected sources in order to meet the emissions limit in the rule; and

(b) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(1) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source, in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee 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 Permittee shall 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.

(3) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee 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 Permittee shall 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.

(4) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(5) 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.

(6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the Permittee shall have the option to conduct a Method 22 visible

emissions monitoring test according to the requirements of paragraphs (1) through (4) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (7) below.

(7) If visible emissions from a building are monitored, the requirements of paragraphs (1) through (4) of this section apply to the monitoring of the building, and the Permittee shall 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.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

D.7.10 Visible Emissions Notations

(a) Visible emission notations of 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 shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.7.11 Record Keeping Requirements [326 IAC 20-27] [40 CFR 63.1355]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(b) To document compliance with Condition D.7.4, 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.7.4.

(c) To document compliance with Condition D.7.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) To document compliance with Condition D.7.10, the Permittee shall maintain records of visible emission notations of 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 once per shift.

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

D.7.12 Reporting Requirements [326 IAC 20-27] [40 CFR 63.1354]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

(1) The plan required by 40 CFR 63.1350 shall be submitted to IDEM, OAQ and U.S. EPA upon startup of the one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18).

(2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status,

(3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee 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 40 CFR 63.6(e)(3), the Permittee 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.

(5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee 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 Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, 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.

(b) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

(c) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports required by this section and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

D.7.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
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

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Synthetic Gypsum Hopper (F11)
Parameter: Material input
Limit: 35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Synthetic Gypsum Weight Belt (F15)
Parameter: Material input
Limit: 35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Raw Material Hopper (F13)
Parameter: Material input
Limit: 15,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Raw Material Weight Belt (F16)
Parameter: Material input
Limit: 15,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
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

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: CKD Silo (EU48)
Parameter: Material input
Limit: 35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Pugmill (EU49)
Parameter: Material input
Limit: 85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Main Belt #2 (F18)
Parameter: Material input
Limit: 85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Outdoor Calcium Sulfate Material Storage Pile (F14)
Parameter: Material input
Limit: 85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

S

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: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for Part 70
Significant Source and Significant Permit Modifications

Source Background and Description

Source Name:	**Lehigh Cement Company**
Source Location:	**121 North First Street, Mitchell, IN 47446**
County:	**Lawrence**
SIC Code:	**3241**
Operation Permit No.:	**T 093-5990-00002**
Operation Permit Issuance Date:	**December 30, 2002**
Significant Source Modification No.:	**093-19158-00002**
Significant Permit Modification No.:	**093-18649-00002**
Permit Reviewer:	**CarrieAnn Paukowits**

The Office of Air Quality (OAQ) has reviewed a modification application from Lehigh Cement Company relating to the construction and operation of the following emission units and pollution control devices:

(a) One (1) calcium sulfate material facility, consisting of the following:

(1) Two (2) storage piles, identified as F10 and F12, 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, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(3) One (1) synthetic gypsum weight belt, identified as F15, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(4) One (1) raw material hopper, identified as F13, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(5) One (1) raw material weight belt, identified as F16, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(6) One (1) main belt #1, identified as F17, 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.

(8) One (1) CKD storage silo, identified as EU48, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as RMDC7, and exhausting to stack S-RMDC7, maximum throughput: 50 tons per hour.

(9) One (1) enclosed CKD conveyor #2, identified as EU51, maximum throughput: 50 tons per hour.

(10) One (1) enclosed pugmill, identified as EU49, maximum capacity: 100 tons per hour.

(11) One (1) main belt #2, identified as F18, 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.

Some of the calcium sulfate material will later be processed through the finish mills in place of other materials.

The applicant is also proposing to change emission limitations for some existing facilities in the existing permit.

History

On January 26, 2004, Lehigh Cement Company submitted an application to the OAQ requesting to add one (1) synthetic gypsum blending facility to their existing plant. The application was initially also for three (3) alternative fuel delivery systems; However, that request has been withdrawn. On May 11, 2004, Lehigh Cement Company provided additional information redefining the synthetic gypsum blending facility as a calcium sulfate material facility and providing updated hourly capacities.

The new pugmill will handle materials from the existing CKD process, which will not increase in potential capacity, as well as raw materials from the proposed calcium sulfate material facility. Some of the calcium sulfate is eventually processed in the finishing mills. The calcium sulfate will not be heated or processed through the kilns. Lehigh Cement Company also requested changes to the limits in the permit, which were developed in order to make the requirements of 326 IAC 2-2 not applicable to the most recent modification (permitted in SSM 093-15822 and SPM 093-16851).

Lehigh Cement Company was issued a Part 70 permit on December 30, 2002. A first significant source modification (093-15822) was issued on June 24, 2003, and a first significant permit modification (093-16851) was issued on July 11, 2003.

Enforcement Issue

The source has the following enforcement actions pending:

(a) Case No. 2003-13636-A

Pursuant to 326 IAC 5-1-2(2)(B) and Condition D.4.3(b) of Part 70 Permit No. T 093-5990-00002, visible emissions shall not exceed twenty percent (20%). Kiln #1 and Kiln #2 exceeded 20% opacity during the second quarter of 2003. A Notice of Violation (NOV) was signed on February 24, 2004.

(b) Case No. 12777

During a stack test on November 19 and 20, 2002, Clinker Cooler #2 violated 40 CFR 63, Subpart LLL. During a test on January 17, 2003, the source re-tested and was in compliance with the limit. No NOV has been issued as of the date this document was drafted.

(b) Notice of Violation, issued by the EPA in April 2004

Based on initial stack tests for CO emissions from the kilns, this source is in violation of PSD.

Stack Summary

There are no new stacks associated with the proposed emission units.

Recommendation

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

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

An application for the purposes of this review was received on January 26, 2004. Additional information was received on February 27, April 21, May 11, July 12, and July 16, 2004.

Emission Calculations

See page 1 of 2 of Appendix A of this document for detailed potential emissions calculations. See page 2 of 2 of Appendix A of this document for detailed limited potential to emit emissions calculations for the proposed facilities.

The one (1) calcium sulfate material facility will neither release a bottleneck nor potentially increase the utilization of other facilities at this source. The new pugmill will handle materials from the existing CKD process, which will not increase in potential capacity, as well as raw materials from the proposed calcium sulfate material facility. The CKD silo in the calcium sulfate material process was previously used as part of EU13, as a blending bin. Some of the calcium sulfate is eventually processed in the finishing mills in place of other materials. Thus, the calcium sulfate materials will replace other materials in the process and there is no increase in the capacity of existing facilities. Therefore, the only increase in the potential emissions resulting from this construction and operation is the potential emissions from the proposed new units.

Potential To Emit of Modification (addition of the one (1) calcium sulfate material facility only)

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

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

Pollutant	Potential To Emit (tons/year)
PM	53.5
PM_{10}	25.3
SO_2	-
VOC	-
CO	-
NO_X	-

HAPs	Potential To Emit (tons/year)
Individual	Negligible
TOTAL	Negligible

Justification for Modification

The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 326 IAC 2-7-10.5(f)(4), any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}). The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (SPM 093-18649-00002) in accordance with 326 IAC 2-7-12(b)(1) because the modification will change a case-by-case determination of an emission limitation or standard, and is a modification under Title 1 of the Clean Air Act. The Significant Permit Modification will give the source approval to operate the proposed facilities.

County Attainment Status

The source is located in Lawrence County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
1-HourOzone	attainment
8-Hour Ozone	attainment
CO	attainment
Lead	attainment

(a) 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 emissions and NO_X are considered when evaluating the rule applicability relating to ozone. Lawrence County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_X were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability section of this document.

(b) Lawrence County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	**Emissions** (tons/year)
PM	577
PM_{10}	606
SO_2	2,417
VOC	98.4
CO	544
NO_X	3,595

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon the TSD to SPM 093-16851, issued on July 11, 2003.

Potential to Emit of Modification After Issuance

See "326 IAC 2-2" in the *State Rule Applicability* Section of this document.

Federal Rule Applicability

(a) This significant permit modification does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for PM_{10}:

(1) with the potential to emit before controls equal to or greater than the major source threshold for PM_{10};

(2) that is subject to an emission limitation or standard for PM_{10};and

(3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this modification.

(b) This Portland cement manufacturing plant is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Portland Cement Industry (40 CFR 63.1340 - 63.1358, Subpart LLL). The proposed facilities include a pugmill, conveying system transfer points and bulk loading and unloading at an existing HAP major source. The storage piles with fugitive emissions are not affected facilities and are not subject to this rule. In addition, pursuant to page 31900 of the Federal Register, Volume 64, Number 113, the requirements of this rule do not apply to units that only handle or store CKD.

(1) Pursuant to this rule, the visible emissions from the calcium sulfate material facility, including one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the calcium sulfate material facility, including one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18) shall not exceed ten percent (10%) opacity.

(2) The Permittee shall demonstrate initial compliance with the limits established the permit by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A.

(3) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for each affected source upon startup. The plan shall include the following information:

(A) Procedures for proper operation and maintenance of the affected sources in order to meet the emissions limit in the rule; and

(B) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(i) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source, in accordance with 40 CFR 60, Appendix A, Method 22. 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 Permittee 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 Permittee shall 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 Permittee 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 Permittee shall 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 Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. 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 Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (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 (vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (I) through (iv) of this section apply to the monitoring of the building, and the Permittee shall 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.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

(4) To document compliance with the NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(A) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(B) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(i) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(ii) All records of applicability determination, including supporting

analyses.

(5) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

(A) The plan required by 40 CFR 63.1350 shall be submitted to IDEM, OAQ and U.S. EPA upon startup.

(B) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status,

(C) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(D) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee 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 40 CFR 63.6(e)(3), the Permittee 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.

(E) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee 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 Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, 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.

(F) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

(c) The proposed calcium sulfate material facility at this source is subject to the requirements of 40 CFR 63, Subpart LLL; Therefore, pursuant to 40 CFR 63.1356, the facilities are exempt from the requirements of 40 CFR 60, Subparts F and OOO.

(d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

State Rule Applicability - Individual Facilities

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

The existing source is a major source pursuant to 326 IAC 2-2, PSD. PM and PM_{10} limitations in the existing permit made a previous modification a minor modification to an existing major source. The applicant has requested changes to those limitations, developed in SPM 039-16851, issued on July 11, 2003, as part of this modification. The overall potential to emit of PM_{10} from the modification will decrease and the overall potential to emit PM will increase by 0.4 ton per year, as a result of these changes. Based on the TSD to SPM 039-16851, the projected net increase in PM and PM_{10} from the modification was 22.6 and 13.5 tons per year, respectively. As illustrated by the tables below, the projected net increase of PM and PM_{10} emissions from that modification and the proposed units are 23.0 and 11.0 tons per year, respectively, based on the revised limitations. These changes will not make this modification a major modification to the existing major source. The existing limitations for which the applicant is requesting changes, and changes to those limitations are as follows:

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**	~~1.13~~ **0.85**
Quarry Surge Bin and Transfer System (EU02) with BH	2,500	~~0.90~~ **0.50**	~~1.13~~ **0.63**
Sec. Crusher (EU03) & Tertiary Crusher (EU04) with BH	2,500	~~1.44~~ **0.72**	~~1.80~~ **0.90**
N. Screen House (EU05) with BH	2,500	0.18	0.23
S. Screen House (EU06) with BH	2,500	~~1.44~~ **0.79**	~~1.80~~ **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 (EU 13) with BH (RMDC5)	8,760	1.06	4.64
Blending Bins (EU 13) 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~~ **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

Controlled Emission Source	Operating Time Limit (hrs/yr)	PM/PM_{10} limit (lb/hr)	Equivalent PTE (tons/yr)
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~~ **8,760**	1.76	~~1.32~~ **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	~~1.70~~ **0.85**	~~7.45~~ **3.72**
E. Clinker Ladder (EU30) with BH	~~1,500~~ **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 (EU40 B) 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	~~1.84~~ **0.92** each baghouse	~~5.06~~ **2.53** (only 1 baghouse can operate at a time)
Total Future PTE	**tons/yr**		**275.9**

Since the limit on the hours of operation for the North Clinker Tower (EU26A) and the East Clinker Ladder (EU30) have been removed, the report forms for those limits have also been removed from the

permit. The previous modification also consisted of changes to two (2) Kilns (Kiln #1 and Kiln #2). The potential to emit from Kilns 1 and 2 were limited, as follows:

Emission Unit	Production (tons/yr)	PM Emission Limitation (lbs/ton)	PM_{10} Emission Limitation (lbs/ton)	Equivalent PM PTE (tons/yr)	Equivalent PM_{10} PTE (tons/yr)
Kiln #1	321,875	0.28	0.59	45.06	94.95
Kiln #2	321,875	0.28	0.59	45.06	94.95
Total of two (2) Kilns				**90.1**	**189.9**

The potential to emit of the one (1) proposed calcium sulfate material facility is limited in this proposed approval by limiting the material input to each of 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	85,000	0.0121	0.0057	0.51	0.24

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)
previous limits)					
Storage	-	-	-	0.02	0.02
			Totals:	4.01	1.91

The pound per ton emission limitations in the above table are the AP-42 emission factors for aggregate handling and are conservative for this process (AP-42 13.2.4). Therefore, no testing is required in order for the source to show compliance with the emission limitations.

The total of the changes permitted in SPM 039-16851, issued on July 11, 2003, including the proposed revised limits and the new facilities must be evaluated to determine the applicability of 326 IAC 2-2, PSD. The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 permit modification.

	Potential to Emit (tons/year)						
Process/facility	**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	1.91	-	-	-	-	-
+ 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
- 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	^^	^^	0.0	0.3	5.2	6.2	0.000

	Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**Lead**
Mill Natural Gas Furnace							
Projected Net Increase (TPY)	23.0	11.0	36.0	36.0	90.0	36.0	.540
PSD Threshold (TPY)	25	15	40	40	100	40	0.6

^ Emissions for Raw Mill Heater are accounted for in the "potential emissions upstream and downstream of preheater kilns"

^^ Emissions for Raw Mill Heater are accounted for in the "Past actual upstream and downstream of kilns"

The values for the future potential to emit are based on the TSD for SPM 039-16851, issued on July 11, 2003, except for the potential to emit PM and PM_{10} calculated above the table. The past actual emissions are also based on that TSD, but were decreased slightly because the past actual emissions from the packing machine had been counted twice. Some units now have more stringent hourly limitations than the previous limitations. Based on the potential hourly emission calculations provided by the applicant, all of those units will comply with the limitations above. This modification to an existing major stationary source is still not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 5-1 (Opacity Limitations)

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

(1) 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.

(2) 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.

(b) The opacity requirements in 40 CFR 63, Subpart LLL, which are more restrictive, are applicable to those facilities subject to 40 CFR 63, Subpart LLL, at all times except during startup and shut down. The requirements of 326 IAC 5-1 are applicable to all facilities at this source during startup and shut down.

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

Pursuant to 326 IAC 6-3-2, the particulate from the proposed facilities at the one (1) calcium sulfate material facility shall be limited as follows:

Process	Process Weight Rate (tons/hr)	Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)	Unrestricted PM Emissions (lbs/hr)
Input to Synthetic Gypsum Storage Piles (F10)	60	46.3	0.724
Input to Raw Materials Storage Piles (F12)	60	46.3	0.724
Input to Synthetic Gypsum Hopper (F11)	60	46.3	0.724
Input to Synthetic Gypsum Weight Belt (F15)	60	46.3	0.724
Input to Raw Material Hopper (F13)	60	46.3	0.724
Input to Raw Material Weight Belt (F16)	60	46.3	0.724
Input to Main Belt #1 (F17)	100	51.3	1.21
Input to CKD silo (EU48)	50	44.6	0.603
Input to Pugmill (EU49)	100	51.3	1.21
Input to Main Belt #2 (F18)	100	51.3	1.21
Input to Outdoor calcium sulfate material storage pile (F14)	100	51.3	1.21
Input to Storage Building	100	51.3	1.21
Pile Movement	100	51.3	1.21

These limitations are based on the following equation:

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:

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

Since the unrestricted potential emissions from each process are less than the limited potential emissions based on 326 IAC 6-3-2, these processes will comply with this rule.

326 IAC 20-27 (Portland Cement Manufacturing Industry)

This rule incorporates 40 CFR 63, Subpart LLL by reference. The proposed operations at this source are subject to this rule as indicated in the *Federal Rule Applicability* Section of this document.

Testing Requirements

(a) During the review for the first significant permit modification (093-16851), issued on July 11, 2003, IDEM, OAQ, determined which existing units would be required to test. The limits for some facilities have changed. These include the primary crusher (EU01), the quarry surge bin and transfer system (EU02), the secondary and tertiary crusher (EU03 and EU04), the south screen house (EU06), Kiln #1 feed bin (EU18), Kiln #2 feed bin (EU20), the pan conveyor (EU29), the packing machine (EU22), and Raw Mill #1 (EU11). Of those units, only the secondary and tertiary crushers (EU03 and EU04) exhausting to the same baghouse, and the Raw Mill #1, were required to test. Testing was conducted in December 2003, and is pending review by IDEM. Those tests must show compliance with the limits in this permit. Since IDEM, OAQ, determined that testing is not required for the other facilities, and, based on the information provided by the applicant, the facilities can comply with the revised limitations in this approval, no additional testing is required at this time.

(b) Testing will be required for the calcium sulfate material facility to show compliance with 40 CFR 63, Subpart LLL.

(c) All additional testing requirements currently in the Part 70 Operating Permit will remain in the permit.

Compliance Requirements

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

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

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

The one (1) calcium sulfate material facility has applicable compliance monitoring conditions as specified below:

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for each affected source upon startup. The plan shall include the following information:

(a) Procedures for proper operation and maintenance of the affected sources in order to meet the emissions limit in the rule; and

(b) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(1) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source, in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee 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 Permittee shall 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.

(3) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee 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 Permittee shall 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.

(4) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(5) 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.

(6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (1) through (4) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (7) of this section.

(7) If visible emissions from a building are monitored, the requirements of paragraphs (1) through (4) of this section apply to the monitoring of the building, and the Permittee shall 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.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

These monitoring conditions are necessary in order for the new facilities to comply with 40 CFR 63, Subpart LLL, and 326 IAC 2-7 (Part 70).

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

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

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

The quarry activities, as follows:

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

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

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

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

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

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

(f) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.

(g) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.

(h) 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 PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.

(i) 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 PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.

(j) 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 PM emissions, and exhausting directly to the atmosphere.

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

(k) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.

(l) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.

(m) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(n) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

(o) CKD disposal and mining facilities, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw material handling and storage facilities/emissions units, as follows:

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

(q) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.

(r) 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.

(s) 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.

(t) One (1) coal pile, identified as F04, storage commencing prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

(u) 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.

The raw mill facilities/emissions units, as follows:

(v) 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-fired burner, identified as EU11A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.

(w) 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-fired burner, identified as EU12A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled

by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

The raw mill storage facilities/emissions units, as follows:

(x) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM 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.

(y) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM 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.

(z) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.

(aa) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.

(bb) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

(cc) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.

(dd) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(ee) One (1) North storage drag, identified as EU26b, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(ff) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.

(gg) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.

(hh) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.

(ii) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5,

and exhausting to one (1) stack, identified as S-FDC5.

(jj) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.

(kk) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM 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.

The finish mill facilities/emissions units, as follows:

(ll) 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 PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.

(mm) 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 PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.

(nn) 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 PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.

(oo) 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 PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.

(pp) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.

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

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

(rr) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.

(ss) 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 PM 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.

(tt) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM 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.

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

(uu) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.

(vv) One (1) east truck vaculoader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.

(ww) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.

(xx) One (1) west truck vaculoader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.

(yy) 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.

(zz) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.

(aaa) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.

(bbb) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM 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.

The kiln facilities/emissions units, as follows:

(ccc) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and ~~to be~~ 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, **and dioxins/furans controlled and SO_2 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.

(ddd) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and ~~to be~~ 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, **and dioxins/furans controlled and SO_2 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.

(eee) 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 PM 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 clinker cooler facilities/emissions units, as follows:

(fff) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.

(ggg) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.

(hhh) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

One (1) calcium sulfate material facility, consisting of the following:

(iii) Two (2) storage piles, identified as F10 and F12, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.

(jjj) One (1) synthetic gypsum hopper, identified as F11, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(kkk) One (1) synthetic gypsum weight belt, identified as F15, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(lll) One (1) raw material hopper, identified as F13, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(mmm) One (1) raw material weight belt, identified as F16, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(nnn) One (1) main belt #1, identified as F17, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ooo) One (1) enclosed CKD conveyor #1, identified as EU50, maximum throughput: 50 tons per hour.

(ppp) One (1) CKD storage silo, identified as EU48, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as RMDC7, and exhausting to stack S-RMDC7, maximum throughput: 50 tons per hour.

(qqq) One (1) enclosed CKD conveyor #2, identified as EU51, maximum throughput: 50 tons per hour.

(rrr) One (1) enclosed pugmill, identified as EU49, maximum capacity: 100 tons per hour.

(sss) One (1) main belt #2, identified as F18, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ttt) One (1) outdoor, partially enclosed calcium sulfate material storage pile, identified as F14, potential capacity: 0.10 acre.

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(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-~~0425~~ **4230** (ask for OAQ, ~~Technical Support and Modeling Section~~ **Billing, Licensing, and Training Section**), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

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

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply ~~upon startup of the preheater Kilns #1 and #2~~:

(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 PM_{10} 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.

These limitations will result in PM and PM_{10} emissions of less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

(b) Pursuant to Significant Permit Modification 093-16851-00002 issued ~~in~~ **on July 11,** 2003, **and Significant Permit Modification 093-18649-00002 issued in 2004,** in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

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

(2) PM and PM_{10} emissions from baghouse QDC2 controlling the Primary Crusher (EU01) **shall each not exceed 0.68 pounds per hour.** ~~and from baghouse QDC3 controlling the Surge Bin and Transfer System (EU02) shall each not exceed 0.90 pounds per hour.~~

(3) PM and PM_{10} emissions from baghouse QDC3 controlling the Quarry Surge Bin and Transfer System (EU02) shall each not exceed 0.50 pounds per hour.

~~(3)~~**(4)** PM and PM_{10} emissions from baghouse QDC7 controlling Belt #7 to Belt #8 Conveyor Transfer Point (EU07) ~~and from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08)~~ shall each not exceed 0.44 pounds per hour.

(5) PM and PM_{10} emissions from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08) shall each not exceed 0.44 pounds per hour.

~~(4)~~**(6)** PM and PM_{10} emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) **shall each not exceed 0.72 pounds per hour** ~~and from baghouse QDC6 controlling the South Screen House (EU06) shall each not exceed 1.44 pounds per hour~~.

(7) PM and PM_{10} emissions from baghouse QDC6 controlling the South Screen House (EU06) shall each not exceed 0.79 pounds per hour.

~~(5)~~**(8)** PM and PM_{10} emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.

~~(6)~~**(9)** PM and PM_{10} emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.

~~(7)~~**(10)** PM and PM_{10} emissions from baghouse KDC7A controlling the CKD Truck Unloading System (EU24A) shall each not exceed 0.36 pounds per hour.

~~(8)~~**(11)** PM and PM_{10} emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

These limits ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to ~~the preheater~~ **these** modification**s**.

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) shall each not exceed ten percent (10%) opacity. ~~On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition~~.

D.2.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

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

(b) PM and PM_{10} emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.

(c) PM and PM_{10} emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.

(d) PM and PM_{10} emissions from baghouse RMDC3 ~~and baghouse RMDC4~~ controlling Raw Mill #1 (EU11) ~~and Raw Mill #2 (EU12) respectively~~ shall each not exceed ~~4.51~~ **3.50** pounds per hour.

(e) PM and PM_{10} emissions from baghouse RMDC4 controlling Raw Mill #2 (EU12) shall each not exceed 4.51 pounds per hour.

These limits ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to ~~the preheater~~ **these** modification**s**.

D.3.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36,

and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) shall not exceed ten percent (10%) opacity. ~~On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.~~

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) In order to render the requirements of PSD not applicable, to the Permittee's: 1979 pan clinker conveyor modification; 1984 packing machine modification; 1987 roll crusher modification; 1989 finish mill #4 separator modification; and 1993 lime bin modification, respectively, the following conditions shall apply:

(1) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.

(2) The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.

(3) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.

(4) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.

(5) The PM_{10} emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.

(6) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.

(7) The PM_{10} emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increases from the modifications above do not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable.

(b) Pursuant to Significant Permit Modification 093-16851-00002 issued ~~in~~ **on July 11,** 2003, **and Significant Permit Modification 093-18649-00002 issued in 2004,** in order to render the requirements of 326 IAC 2-2 (PSD) not applicable ~~to the Kiln #1 and Kiln #2 modification~~, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

(1) PM and PM_{10} emissions from Blending Bins (EU13) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC5 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC6.

(2) PM and PM_{10} emissions from Kiln Supply Silos (EU14) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC7 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC8.

(3) PM and PM_{10} emissions from baghouse KDC1 ~~and baghouse KDC3~~ controlling Kiln #1 Feed Bin (EU18) ~~and Kiln #2 Feed Bin (EU20) respectively~~ shall each not exceed ~~0.97~~ **0.49** pounds per hour.

(4) PM and PM_{10} emissions from baghouse KDC3 controlling Kiln #2 Feed Bin (EU20) shall each not exceed 0.49 pounds per hour.

~~(4)~~**(5)** PM and PM_{10} emissions from baghouse FDC1 controlling South Storage Drag (EU25) shall each not exceed 0.47 pounds per hour.

~~(5)~~**(6)** The ~~North Clinker Tower (EU26A), the East Clinker Ladder (EU30) and the~~ Finish Mill Surge Bin (EU37) shall ~~each~~ be limited to 1,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

~~(6)~~**(7)** PM and PM_{10} emissions from baghouse FDC2 controlling North Clinker Tower (EU26A) shall each not exceed 1.76 pounds per hour.

~~(7)~~**(8)** PM and PM_{10} emissions from baghouse FDC3 controlling South Clinker Tower (EU27) shall each not exceed 1.68 pounds per hour.

~~(8)~~**(9)** PM and PM_{10} emissions from baghouse FDC4 controlling Hot Spout Clinker Ladder (EU28) shall each not exceed 1.76 pounds per hour.

~~(9)~~**(10)** PM and PM_{10} emissions from baghouse FDC5 controlling Pan Conveyor (EU29) shall each not exceed ~~1.70~~ **0.85** pounds per hour.

~~(10)~~**(11)** PM and PM_{10} emissions from baghouse FDC6 controlling East Clinker Ladder (EU30) shall each not exceed 1.21 pounds per hour.

~~(11)~~**(12)** PM and PM_{10} emissions from baghouse FDC7 controlling Roll Crusher (EU31) shall each not exceed 1.84 pounds per hour.

~~(12)~~**(13)** PM and PM_{10} emissions from baghouse FDC8~~, baghouse FDC9 and baghouse FDC10~~ controlling Finish Mill #1 (EU32), ~~Finish Mill #2 (EU33) and Finish Mill #3 (EU34) respectively~~ shall each not exceed 1.42 pounds per hour.

(14) PM and PM_{10} emissions from baghouse FDC9 controlling Finish Mill #2 (EU33) shall each not exceed 1.42 pounds per hour.

(15) PM and PM_{10} emissions from baghouse FDC10 controlling Finish Mill #3 (EU34) shall each not exceed 1.42 pounds per hour.

~~(13)~~**(16)** PM and PM_{10} emissions from baghouse FDC11 controlling Finish Mill #4 (EU35) shall each not exceed 0.64 pounds per hour.

~~(14)~~**(17)** PM and PM_{10} emissions from baghouse FDC12 controlling Finish Mill #4 Separator (EU36) shall each not exceed 3.27 pounds per hour.

~~(15)~~**(18)** The Lime Bin (EU38) shall be limited 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

~~(16)~~**(19)** PM and PM_{10} emissions from baghouse FDC14 controlling Lime Bin (EU38) shall each not exceed 0.22 pounds per hour.

~~(17)~~**(20)** PM and PM_{10} emissions from baghouse FDC13 controlling Finish Mill Surge Bin (EU37) shall each not exceed 0.49 pounds per hour.

~~(18)~~**(21)** PM and PM_{10} emissions from baghouse SDC1 ~~and baghouse SDC2~~ controlling North Silo Operation (EU39A) ~~and South Silo Operation (EU39B) respectively~~ shall each not exceed 1.77 pounds per hour.

(22) PM and PM_{10} emissions from baghouse SDC2 controlling South Silo Operation (EU39B) shall each not exceed 1.77 pounds per hour.

~~(19)~~**(23)** PM and PM_{10} emissions from baghouse SDC3 ~~and baghouse SDC4~~ controlling Silo Transfer - East (EU40A) ~~and Silo Transfer - West (EU40B) respectively~~ shall each not exceed 0.57 pounds per hour.

(24) PM and PM_{10} emissions from baghouse SDC4 controlling Silo Transfer - West (EU40B) shall each not exceed 0.57 pounds per hour.

~~(20)~~**(25)** PM and PM_{10} emissions from baghouse SDC5 ~~and baghouse SDC7~~ controlling East Truck Loadout Bin (EU41) ~~and West Truck Loadout Bin (EU43) respectively~~ shall each not exceed 0.43 pounds per hour.

(26) PM and PM_{10} emissions from baghouse SDC7 controlling West Truck Loadout Bin (EU43) shall each not exceed 0.43 pounds per hour.

~~(21)~~**(27)** PM and PM_{10} emissions from baghouse SDC6 ~~and baghouse SDC8~~ controlling East Vaculoader (EU42) ~~and West Vaculoader (EU44)~~ shall each not exceed 0.22 pounds per hour.

(28) PM and PM_{10} emissions from baghouse SDC8 controlling West Vaculoader (EU44) shall each not exceed 0.22 pounds per hour.

~~(22)~~**(29)** The Railroad Loadout Bin (EU45) and the Articuloader (EU46) shall be limited to 2,000 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

~~(23)~~**(30)** PM and PM_{10} emissions from baghouse SDC9 controlling Railroad Loadout Bin (EU45) shall each not exceed 0.71 pounds per hour.

~~(24)~~**(31)** PM and PM_{10} emissions from baghouse SDC10 controlling Articuloader (EU46) shall each not exceed 0.21 pounds per hour.

~~(25)~~**(32)** The Packing Machine (EU47) shall be limited to 5,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

~~(26)~~**(33)** PM and PM_{10} emissions from baghouse SDC11 and baghouse SDC12 controlling Packing Machine (EU14) shall each not exceed **0.92** ~~1.84~~ pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093- 18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to ~~the preheater~~ **these** modification**s**.

D.3.15 Record Keeping Requirements

(a) To document compliance with Condition D.3.11, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points

associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) once per day and all other baghouse stack exhausts once per shift.

(b) To document compliance with Condition D.3.12, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) once per day and all other baghouses once per shift.

(c) To document compliance with Condition D.3.13, the Permittee shall maintain records of the results of the inspections required under Condition D.3.13.

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a), recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(e) To document compliance with Condition D.3.6(b)(5), (15), (22) and (25), the Permittee shall maintain records of ~~the North Clinker Tower (EU26A), the East Clinker Ladder (EU30),~~ 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.

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

SECTION D.4 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The kiln facilities/emissions units, as follows:

(1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and ~~to be~~ 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, **and dioxins/furans controlled and SO_2 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.

(2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and ~~to be~~ 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, **and dioxins/furans controlled and SO_2 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.

(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 PM 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.)

D.4.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.~~1348~~ **1343** (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) shall be limited as follows:

(a) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln.

(b) Visible emissions shall be limited to twenty percent (20%) opacity.

(c) Dioxin/Furan emissions shall be limited to 8.7×10^{-11} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen; or 1.7×10^{-10} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or less.

(d) The kiln shall be operated such that the three hour rolling average temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.4.7.

~~On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.~~

D.5.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.~~1348~~ **1345** (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, each clinker cooler (EU19, EU21 and EU23) shall be limited as follows:

(a) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.

(b) Visible emissions shall be limited to ten percent (10%) opacity.

~~On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.~~

SECTION D.7 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

One (1) calcium sulfate material facility, consisting of the following:

(iii) Two (2) storage piles, identified as F10 and F12, with emissions uncontrolled and exhausting to the atmosphere, potential capacity: 0.10 and 0.05 acres, respectively.

(jjj) One (1) synthetic gypsum hopper, identified as F11, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(kkk) One (1) synthetic gypsum weight belt, identified as F15, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(lll) One (1) raw material hopper, identified as F13, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(mmm) One (1) raw material weight belt, identified as F16, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 60 tons per hour.

(nnn) One (1) main belt #1, identified as F17, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ooo) One (1) enclosed CKD conveyor #1, identified as EU50, maximum throughput: 50 tons per hour.

(ppp) One (1) CKD storage silo, identified as EU48, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as RMDC7, and exhausting to stack S-RMDC7, maximum throughput: 50 tons per hour.

(qqq) One (1) enclosed CKD conveyor #2, identified as EU51, maximum throughput: 50 tons per hour.

(rrr) One (1) enclosed pugmill, identified as EU49, maximum capacity: 100 tons per hour.

(sss) One (1) main belt #2, identified as F18, with emissions uncontrolled and exhausting to the atmosphere, maximum throughput: 100 tons per hour.

(ttt) 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.7.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the calcium sulfate material facility, including one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the calcium sulfate material facility, including one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.7.2 NESHAP Emissions Limitation [326 IAC 20-27] [40 CFR 63.1348]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), the visible emissions from the calcium sulfate material facility, including one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the calcium sulfate material facility, including one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), shall not exceed ten percent (10%) opacity.

D.7.3 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 the calcium sulfate material facility shall not exceed the following:

Process	Process Weight Rate (tons/hr)	Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)
Input to Synthetic Gypsum Storage Piles (F10)	60	46.3
Input to Raw Materials Storage Piles (F12)	60	46.3
Input to Synthetic Gypsum Hopper (F11)	60	46.3
Input to Synthetic Gypsum Weight Belt (F15)	60	46.3
Input to Raw Material Hopper (F13)	60	46.3
Input to Raw Material Weight Belt (F16)	60	46.3
Input to Main Belt #1 (F17)	100	51.3
Input to CKD silo (EU48)	50	44.6
Input to Pugmill (EU49)	100	51.3
Input to Main Belt #2 (F18)	100	51.3
Input to Outdoor calcium sulfate material storage pile (F14)	100	51.3
Input to Storage Building	100	51.3
Pile Movement	100	51.3

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:

$$E = 55.0\ P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.4 PSD Minor Limit [326 IAC 2-2]

The PM and PM_{10} emissions from the one (1) proposed calcium sulfate material facility is limited as follows:

(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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(h) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(i) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(j) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

These limits will ensure that the PM and PM_{10} emissions increase from the modifications permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.7.6 NESHAP Testing Requirements [326 IAC 20-27] [40 CFR 63.1349]

Within 180 days after startup, the Permittee shall demonstrate initial compliance with the opacity limits established in Condition D.7.2 by conducting performance tests in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A.

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

D.7.7 NESHAP Monitoring Requirements [326 IAC 20-27] [40 CFR 63.1350]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the calcium sulfate material facility, including one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the calcium sulfate material facilities, including one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), upon startup. The plan shall include the following information:

(a) Procedures for proper operation and maintenance of the affected sources in order to meet the emissions limit in the rule; and

(b) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(1) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source, in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee 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 Permittee shall 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.

(3) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee 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 Permittee shall 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.

(4) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(5) 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.

(6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (1) through (4) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (7) below.

(7) If visible emissions from a building are monitored, the requirements of paragraphs (1) through (4) of this section apply to the monitoring of the building, and the Permittee shall 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.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

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

D.7.8 Record Keeping Requirements [326 IAC 20-27] [40 CFR 63.1355]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(b) To document compliance with Condition D.7.4, the Permittee shall maintain records of the material input to each process at the calcium sulfate material facility. Records shall be complete and sufficient to demonstrate compliance with Condition D.7.4.

(c) To document compliance with Condition D.7.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

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

D.7.9 Reporting Requirements [326 IAC 20-27] [40 CFR 63.1354]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

(1) The plan required by 40 CFR 63.1350 shall be submitted to IDEM, OAQ and U.S. EPA upon startup.

(2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status,

(3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee 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 40 CFR 63.6(e)(3), the Permittee 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.

(5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee 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 Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, 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.

(b) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with

any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

(c) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports required by this section and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.7.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

The Quarterly Report Forms for the operating hours at the North Clinker Tower (EU26A) and the East Clinker Ladder (EU30), which were previously on pages 99 and 100 of 107, are being removed. Report forms for Conditions D.7.4 and D.7.10 are being added.

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY~~
~~COMPLIANCE DATA SECTION~~

~~Part 70 Quarterly Report~~

~~Source Name: Lehigh Cement Company~~
~~Source Address: 121 North First Street, Mitchell, Indiana 47446~~
~~Mailing Address: P.O. Box 97, Mitchell, Indiana 47446~~
~~Part 70 Permit No.: T093-5990-00002~~
~~Facility: North Clinker Tower (EU26A)~~
~~Parameter: Operating Time~~
~~Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month~~

~~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:~~

~~Attach a signed certification to complete this report.~~

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~
~~OFFICE OF AIR QUALITY~~
~~COMPLIANCE DATA SECTION~~

~~Part 70 Quarterly Report~~

~~Source Name: Lehigh Cement Company~~
~~Source Address: 121 North First Street, Mitchell, Indiana 47446~~
~~Mailing Address: P.O. Box 97, Mitchell, Indiana 47446~~
~~Part 70 Permit No.: T093-5990-00002~~
~~Facility: East Clinker Ladder (EU30)~~
~~Parameter: Operating Time~~
~~Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month~~

~~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:~~

~~Attach a signed certification to complete this report.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
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**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Synthetic Gypsum Hopper (F11)**
Parameter: **Material input**
Limit: **35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Synthetic Gypsum Weight Belt (F15)**
Parameter: **Material input**
Limit: **35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Raw Material Hopper (F13)**
Parameter: **Material input**
Limit: **15,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Raw Material Weight Belt (F16)**
Parameter: **Material input**
Limit: **15,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
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**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **CKD Silo (EU48)**
Parameter: **Material input**
Limit: **35,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Pugmill (EU49)**
Parameter: **Material input**
Limit: **85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Main Belt #2 (F18)**
Parameter: **Material input**
Limit: **85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: **Lehigh Cement Company**
Source Address: **121 North First Street, Mitchell, Indiana 47446**
Mailing Address: **P.O. Box 97, Mitchell, Indiana 47446**
Part 70 Permit No.: **T093-5990-00002**
Facility: **Outdoor Calcium Sulfate Material Storage Pile (F14)**
Parameter: **Material input**
Limit: **85,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

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:

Attach a signed certification to complete this report.

Conclusion

(a) The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 093-19158-00002.

(b) The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 093-18649-00002.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document for
Significant Source and Significant Permit Modifications to a Part 70 Operating Permit

Source Name:	**Lehigh Cement Company**
Source Location:	**121 North First Street, Mitchell, Indiana 47446**
County:	**Lawrence**
SIC Code:	**3241**
Operation Permit No.:	**T 093-5990-00002**
Significant Source Modification No.:	**093-19158-00002**
Significant Permit Modification No.:	**093-18649-00002**
Permit Reviewer:	**CarrieAnn Paukowits**

On August 2, 2004, the Office of Air Quality (OAQ) had a notice published in the Times-Mail, Bedford, Indiana, stating that Lehigh Cement Company had applied for a Significant Source Modification and a Significant Permit Modification to a Part 70 Operating Permit to construct and operate calcium sulfate material facilities/emission units, as well as change some emission limitations for existing facilities. The notice also stated that OAQ proposed to issue a Significant Source Modification and Significant Permit Modification and provided information on how the public could review the proposed Significant Source Modification and Significant Permit Modification 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 Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit should be issued as proposed.

On August 31, 2004, Debbie Tolliver of Lehigh Cement Company submitted comments on the proposed Significant Source and Significant Permit Modifications to a Part 70 Operating Permit. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language bolded.):

Comment 1:

SSM Cover Page - The phrase between the two text boxes should reference the "First Significant Source Modification No. 093-15822-00002 issued on June 24, 2003" instead of the "First Significant Permit Modification No. 093-16851-00002, issued on July 11, 2003."

Response 1:

Source modifications do not need to be listed on the cover page of the approvals. The permit modifications make the changes to the permit effective and all previous permit modifications and amendments are listed on the cover page of the approvals.

Comment 2:

SSM Cover Page – The second text box on the Cover Page should reference the "Second Significant Source Modification No. 093-19158-00002." The First Significant Source Modification No. 093-15822-00002 was issued on June 24, 2003.

Response 2:

The second box on the cover page of the source modification has been revised as follows:

~~First~~ **Second** Significant Source Modification No.: 093-19158-00002	Conditions Affected: A.2 **(ccc) and (ddd), A.2 (iii) through (ttt) has been added**, **B.13(a),** B.24, **C.7, C.11, C.20, D.1.1(b),** D.1.3, **D.1.5,** D.2.3, D.2.7, **D.2.8,** D.3.4, D.3.6, **D.3.8(b), D.3.9,** D.3.15(e), D.4.4**, D.4.5, D.4.7(b), D.4.10, D.4.11, D.4.16(c), (d), (e), and (f), D.4.17(g)** ~~and~~ D.5.4**, D.5.7, and D.5.8**; Facility Description Box in D.4; **Facility Description Box in D.5;** all of D.7 has been added; the Quarterly Report Forms for the North Clinker Tower (EU-26A) and the East Clinker Ladder (EU-30) have been removed; Ten (10) report forms for Section D.7 have been added; Condition B.25 has been added
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 5, 2004

Comment 3:

SSM and SPM Cover Pages - The Conditions Affected Sections included on the Cover Pages of the SSM and SPM are incomplete and inaccurate. Consistent with the changes discussed in the Technical Support Document ("TSD") and the changes included in the SPM, the Conditions Affected Sections should be modified as follows:

> Conditions Affected: Table of Contents, A.2(ccc) and (ddd), B.13(b) and (d), B.24, C.12(c)(2)(B), D.1.3, D.2.3, D.2.7, D.2.11(a), D.3.4, D.3.6, D.3.15(e), D.4.4, D.4.16(d), D.5.4, D.5.8, D.5.15(d); Facility Description Boxes in Sections D.4 and D.5; the Quarterly Deviation Form; the Quarterly Report Forms for the North Clinker Tower (EU26A) and the East Clinker Ladder (EU30) have been removed; Facility Descriptions A.2(iii) through (ttt) have been added; Condition B.25 has been added; all of Section D.7 has been added; Ten (10) report forms for Section D.7 have been added

Additionally, any changes made to the Draft Permits following their public notice will need to be included in the Conditions Affected Sections.

Response 3:

For some of the conditions mentioned, the formatting and numbering was inadvertently changed in this modification, and has been changed back to the previous version of the permit (see individual responses). The Table of Contents is not a section, condition or report form. It is changed with all updates, amendments and modifications to the permit, as necessary, and does not need to be mentioned as a "Condition Affected." The "Conditions Affected" in the second box on the Source Modification and Significant Permit Modification has been revised as follows:

Conditions Affected: A.2 **(ccc) and (ddd), A.2 (iii) through (ttt) has been added**, **B.13(a),** B.24, **C.7, C.11, C.20, D.1.1(b),** D.1.3, **D.1.5,** D.2.3, D.2.7, **D.2.8,** D.3.4, D.3.6, **D.3.8(b), D.3.9,** D.3.15(e), D.4.4**, D.4.5, D.4.7(b), D.4.10, D.4.11, D.4.16(c), (d), (e), and (f), D.4.17(g)** ~~and~~ D.5.4**, D.5.7, and D.5.8**; Facility Description Box in D.4; **Facility Description Box in D.5;** all of D.7 has been added; the Quarterly Report Forms for the North Clinker Tower (EU-26A) and the East Clinker Ladder (EU-30) have been removed; Ten (10) report forms for Section D.7 have been added; Condition B.25 has been added

Comment 4:

Table of Contents – The Table of Contents needs to be modified consistent with these Comments.

Response 4:

The Table of Contents has been modified, as appropriate.

Comment 5:

Facility Descriptions A.2(ccc) and (ddd) - Facility Descriptions A.2(ccc) and (ddd) both contain language in strike out font which should be deleted. Delete "~~to be~~" included in the first line of both of these Conditions.

Response 5:

The struck out language in items (ccc) and (ddd) of Condition A.2 has been removed. The condition now reads:

The kiln facilities/emissions units, as follows:

(ccc) 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and dioxins/ furans controlled and SO_2 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.

(ddd) 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 PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and dioxins/ furans controlled and SO_2 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.

Comment 6:

SPM Section A.2(iii) through (ttt) Facility Descriptions and Section D.7 Facility Descriptions - The facility descriptions included in Sections A.2 and D.7 for the new facilities/emission units should be entitled "the calcium sulfate material facilities/emissions units."

Response 6:

The title of items (iii) through (ttt) of Section A.2 and the Facility Description Box in Section D.7 has been revised as follows:

~~One (1)~~ Calcium sulfate material ~~facility~~ **facilities/emission units**, consisting of the following:

Comment 7:

SPM Section A.2(ppp) Facility Description and Section D.7(ppp) Facility Description – The facility description included for Section A.2(ppp) and Section D.7(ppp) for the CKD storage silo should be replaced with the following:

"One (1) CKD storage silo, identified as EU48, 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 existing baghouse controlling the CKD storage silo is baghouse RMDC5 instead of RMDC7. Please make any necessary changes to the SSM, SPM, and Technical Support Document to be consistent with this change.

Response 7:

Item (ppp) of Section A.2 and the Facility Description Box in Section D.7 have been revised as follows:

(ppp) One (1) CKD storage silo, identified as EU48, previously used as a blending bin, with particulate emissions controlled by an existing baghouse, identified as ~~RMDC7~~ **RMDC5**, and exhausting to stack ~~S-RMDC7~~ **S-RMDC5**, maximum throughput: 50 tons per hour.

Comment 8:

SPM Section A, Specifically Regulated Insignificant Activities – The subsection of Section A entitled, Specifically Regulated Insignificant Activities, which follows the facility descriptions should be labeled A.3 rather than repeating A.2.

Response 8:

The numbering was correct in the previous version of the permit, and has been corrected in the Significant Permit Modification as follows:

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

Comment 9:

SPM Section A, Part 70 Permit Applicability – The subsection of Section A entitled, Part 70 Permit Applicability, at the end of Section A should be labeled A.4 rather than A.3. See comment above.

Response 9:

The numbering was correct in the previous version of the permit, and has been corrected in the Significant Permit Modification as follows:

A.~~3~~ **4** Part 70 Permit Applicability [326 IAC 2-7-2]

Comment 10:

Condition B.13 – The subsection numbers B.13(b)(1) through (11) and B.13(d)(1) through (6) were deleted from SPM Condition B.13; however, Condition B.13 was not included in the Conditions Affected section on the SPM Cover Page, nor was this change to Condition B.13 included in the SSM.

Response 10:

Condition B.13 was not revised as part of this modification. However, in re-formatting and printing the document, the numbering changed. The numbering in Condition B.13 has been corrected in the Significant Permit Modification to match the previous version of the permit, as follows:

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

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

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

(b) From the effective date of this permit, the Permittee's right to operate this source is pursuant to this Title V permit. All previously issued operating permits, including those listed below, are superseded by this permit. All operating permits that are currently in effect are hereby revoked by the issuance of this Title V Permit and are no longer in effect.

(1) OP 47-01-88-0072, issued on May 30, 1984;
(2) OP 47-01-88-0073, issued on May 30, 1984;
(3) OP 47-01-88-0074, issued on May 30, 1984;
(4) OP 47-01-88-0075, issued on May 30, 1984;
(5) OP 47-01-88-0076, issued on May 30, 1984;
(6) OP 47-01-88-0077, issued on May 30, 1984;
(7) OP 47-01-88-0078, issued on May 30, 1984;
(8) OP 47-01-88-0079, issued on May 30, 1984;
(9) OP 47-01-88-0080, issued on May 30, 1984;
(10) OP 47-01-92-0097, issued on July 22, 1987; and
(11) OP 47-04-92-0099, issued on March 30, 1988.

(c) Construction Permit CP093-4598-00002, issued on February 27, 1998, which allowed the source to burn waste tires as a fuel in their kilns, has been revoked. Subsequent amendments and modifications to that permit including A093-9623 issued April 29, 1998, 093-11248 issued September 9, 1999, and 093-11552 issued October 23, 2000 have also been revoked. The source is no longer permitted to burn waste tires.

(d) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following nonapplicability determinations regarding this source:

(1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 326 IAC 12 and 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.

(2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as volatile organic liquid (VOL).

(3) The quarry activities, the quarry material sizing facilities/emission units, and the raw material handling and storage facilities/emission units 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.

(4) 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 this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).

(5) 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.

(6) Paragraphs #2 through #7 of exemption CP 093-9431-00002, issued August 19, 1999, list requirements pursuant to Indiana Solid Waste Regulations, 326 IAC 10 and 326 IAC 11. IDEM has not included these requirements in the Part 70 permit because IDEM, OAQ has determined that these conditions are not applicable requirements as defined by 326 IAC 2-7-1(6).

(e) 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.

(f) 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.

(g) 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.

(h) 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).

(i) 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)]

(j) 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)(7)]

Comment 11:

Condition D.1.3 – Condition D.1.3(a) is confusing and does not fully or accurately describe the applicable requirements. The short-term limitations included in Condition D.1.3(a) do not reference the PSD required tons per year limitation and consistent with the applicable requirement should include the following after the pound per hour short-term limitation: "(assuming these sources are operating 8760 hour per year)." Additionally, Minor Source Modification 093-11313 issued on November 9, 1999 does not regulate the CKD disposal and mining facilities (F05). Furthermore, the CKD disposal and mining facilities (F05) are a part of Lehigh's ongoing solid waste activities, with fugitive emissions venting to the atmosphere. Also, the requirements included in Condition D.1.3(b) are inaccurate and confusing. To clarify the relevant limitations, modify the Condition D.1.3 as follows:

(a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply:

(1) The combined PM emissions from the CKD mixer (EU24B) and the CKD truck loadout (F07) shall not exceed 5.68 pounds per hour (assuming these sources are operating 8760 hours per year).

(2) The combined PM_{10} emissions from the CKD mixer (EU24B) and the CKD truck loadout (F07) shall not exceed 3.40 pounds per hour (assuming these sources are operating 8760 hours per year).

(b) Pursuant to First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, 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 12 consecutive month period with compliance determined at the end of each month.

(2) PM and PM_{10} emissions from baghouse QDC7 controlling Belt #7 to Belt #8 Conveyor Transfer Point (EU07) shall each not exceed 0.44 pounds per hour.

(3) PM and PM_{10} emissions from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08) shall each not exceed 0.44 pounds per hour.

(4) PM and PM_{10} emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.

(5) PM and PM_{10} emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.

(6) PM and PM_{10} emissions from baghouse KDC7A controlling the CKD Truck Unloading System (EU24A) shall each not exceed 0.36 pounds per hour.

(7) PM and PM_{10} emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

(c) Pursuant to Second Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon issuance:

(1) PM and PM_{10} emissions from baghouse QDC2 controlling the Primary Crusher (EU01) shall each not exceed 0.68 pounds per hour.

(2) PM and PM_{10} emissions from baghouse QDC3 controlling the Surge Bin and Transfer System (EU02) shall each not exceed 0.50 pounds per hour.

(3) PM and PM_{10} emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) shall each not exceed 0.72 pounds per hour.

(4) PM and PM_{10} emissions from baghouse QDC6 controlling the South Screen House (EU06) shall each not exceed 0.79 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increases from the modifications permitted in Minor Source Modification 093-11313 issued on November 9, 1999, First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Second Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed the PSD Major Modification significant thresholds of 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

Response 11:

In order to avoid confusion, each comment is addressed separately. The responses are as follows:

(a) The statement "assuming these sources are operating 8760 hour per year" is not included in the condition because the limits are applicable each hour, regardless of the total hours of operation each year. As an alternative, the Permittee may apply to modify the limit to a pound per ton emission limitation in association with a ton per year material throughput limitation similar to that in Section D.7 of the permit.

(b) Condition D.1.3 states, "pursuant to minor source modification 093-11313 issued November 9, 1999…" That statement was not changed, altered or added during this modification. In addition, the context and limitations were not changed, altered or added during this modification. The CKD disposal and mining facilities (F05) were added to the limitation in Condition D.1.3(a) in the Addendum to the Technical Support Document for the Part 70 Operating Permit (T093-5990-00002), issued on December 30, 2002. Condition D.1.3(a) has been revised as follows:

(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:

(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 PM_{10} 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.

These limitations will result in PM and PM_{10} emissions of less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

(c) IDEM, OAQ, disagrees with the comment on Condition D.1.3(b). Lehigh Cement Company requested revisions to the limitations that made 326 IAC 2-2 not applicable to the modification permitted on July 11, 2003. For the purposes of this review, all limitations from the previous modification were re-evaluated. Therefore, the limitations are pursuant to both the First Significant Permit Modification (093-16851-00002), issued on July 11, 2003, and the Second Significant Permit Modification (093-18649-00002), issued in 2004, regardless of whether they were revised in this modification. In addition, the facilities limited have been arranged in ascending number order as previously requested by Lehigh Cement Company.

Comment 12:

Conditions D.2.3, D.3.4, D.4.4, and D.5.4, Page 13 of TSD – The last sentences of Conditions D.2.3, D.3.4, D.4.4, and D.5.4 which read "On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition" have been deleted from the Draft Permit and should be reinstated.

The language of 326 IAC 5-1-1 makes it clear that the 326 IAC 5-1-2 was established as a general limitation on opacity, which is applicable only where a specific opacity limitation has not been promulgated under either 326 IAC 6 (County Specific Particulate Matter Limitations), 326 IAC 11 (Emission Limitations for Specific Types of Operations), or 326 IAC 12 (New Source Performance Standards).

The National Emission Standards for Hazardous Air Pollutants ("NESHAP") for the Portland Cement Manufacturing Industry were promulgated to update and take precedence over the New Source Performance Standards ("NSPS") for Portland Cement Plants. To eliminate overlap or duplicative coverage of NSPS and NESHAP standards for Portland cement facilities, affected sources subject to requirements under 40 CFR Part 63, Subpart LLL are exempted from the requirements under 40 CR Part 60, Subpart F. (See 64 Fed. Reg. 31907 and 40 CFR § 63.1356)

IDEM has incorporated the NESHAP for the Portland Cement Manufacturing Industry at 326 IAC 20-27, by incorporating 40 CFR Part 63, Subpart LLL by reference. Lehigh's kilns are subject to a NESHAP twenty percent (20%) opacity limitation and all of its other affected facilities are subject to a NESHAP ten percent (10%) opacity limitation. Moreover, all of Lehigh's kilns would now be subject to the NSPS twenty percent (20%) opacity limitation but for the fact the NSPS opacity limits are superceded by 40 CFR Part 63, Subpart LLL.

Since NSPS/NESHAP opacity limitations have been established for Lehigh's kilns (20% opacity limitation), and NESHAP opacity limits have been established for Lehigh's clinker coolers, raw mills, material storage building, raw mill storage facilities/emission units, the roll crusher, the finish mill facilities/emission units, the finish material storage bulk loading and packaging facilities/emission

units, and the conveyor transfer points associated with the south storage drag, the north clinker tower, the north storage drag, the south clinker tower, and the pan clinker conveyor (10% opacity limitation), the forty percent (40%) opacity limitation set forth in 326 IAC 5-1-2(1) does not apply to these facilities/emission units.

The fact that Lehigh's twenty percent (20%) opacity limitation does not apply during startup, shutdown or malfunction (see 40 CFR § 60.11(c) and 40 CFR § 63.6(h)) does not affect this determination. Similarly, the opacity limitations contained in 326 IAC 5-1-2 do not apply to a source when opacity limits have been established in 326 IAC 6. It does not matter that certain of the opacity limitations contained in 326 IAC 6 also contain various exemptions from the specific opacity limitations established in that rule. 326 IAC 5-1-1 only requires that an opacity limitation be established, it does not require that the opacity limitation established in 326 IAC 6, 11 or 12 be more stringent than the limits set forth in 326 IAC 5-1-2.

The IDEM and the U.S. EPA reviewed Lehigh's Initial Part 70 Operating Permit issued on December 30, 2002, and Lehigh's First Significant Permit Modification, issued on July 11, 2003, which both included the determination that 326 IAC 5-1-2 does not apply to the facility/emission units subject to 40 CFR Part 63, Subpart LLL opacity limitations. Additionally, Lehigh specifically discussed this issue with IDEM's permitting and legal counsel staff. Lehigh has not requested that these conditions be changed, nor have additional applicable requirements become effective.

Response 12:

The opacity limitations set forth in 326 IAC 5-1 et seq. apply to facilities, except that the opacity limitations set forth in 326 IAC 5-1-2 shall not apply to "facilities for which specific opacity limitations have been established in 326 IAC 6, 326 IAC 11 or 326 IAC 12." The New Source Performance Standards at 40 CFR 60.11(c) state that the NSPS opacity standards apply except during periods of startup, shutdown and malfunction, and as otherwise provided in the applicable standard. Therefore, no quantifiable opacity standard is established by 326 IAC 12 during the period of startup, shutdown and malfunction, and the 326 IAC 5-1-2 opacity standards apply during these periods that the NSPS opacity standard does not apply. On the other hand, 326 IAC 5-1-2 is silent with respect to standards established by the NESHAP or 326 IAC 20. IDEM would argue that both the NESHAP opacity limit and the 326 IAC 5-1-2 opacity limit apply to affected units during normal operations. However, because 40 CFR 63.6(h) provides that the NESHAP opacity standard does not apply during periods of startup, shutdown and malfunction, the affected unit need only comply with the 326 IAC 5-1-2 opacity standard during startup, shutdown and malfunction. Therefore, there are no changes to the permit.

Comment 13:

Condition D.2.7 – The modifications to Condition D.2.7 are inaccurate and confusing. To clarify the relevant limitations, modify Condition D.2.7 as follows:

(a) Pursuant to First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, 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 12 consecutive month period with compliance determined at the end of each month.

(2) PM and PM_{10} 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 PM_{10} emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.

(4) PM and PM_{10} emissions from baghouse RMDC4 controlling Raw Mill #2 (EU12) shall each not exceed 4.51 pounds per hour.

(b) Pursuant to Second Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, upon issuance, PM and PM_{10} emissions from baghouse RMDC3 controlling Raw Mill #1 (EU11) shall each not exceed 3.50 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increases from the modifications permitted in First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Second Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed the PSD Major Modification significant thresholds of 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

Response 13:

This comment involves separating the limits into (a) and (b) sections within the condition such that only the limits actually revised in this approval are specified as being pursuant to this approval. However, that is not accurate. See Response 11(c). There are no changes to the permit.

Comment 14:

Condition D.2.11(a) - The subsection numbers D.2.11(a)(1), (2), and (3) (not the text) were deleted from SPM Condition D.2.11(a), however, Condition D.2.11(a) was not included in the Conditions Affected section on the SPM Cover Page, nor was this change included in the SSM.

Response 14:

In reformatting and printing the entire updated permit, the numbering system for Condition D.2.11 was inadvertently changed. The condition has been revised in the Significant Permit Modification to match the previous version of the permit, as follows:

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

(a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:

(1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.2.3; and

(2) Procedures to be used to periodically monitor the material storage building (F03), which is subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(A) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(B) If no visible emissions are observed in six consecutive monthly tests for any

affected source, the Permittee 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 Permittee shall 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.

(C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee 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 Permittee shall 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.

(D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

(b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up 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 follow-up 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 visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment 15:

Section D.3 Facility Description Boxes – Because the facility descriptions in Section D.3 do not fit on one page, and into one box, each facility description box needs to contain the following statement: “The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.” This language was included in both Lehigh’s initial Part 70 Operating Permit and its First Significant Permit Modification and appears to have been inadvertently deleted in some of the facility description boxes included at the beginning of Section D.3 of the Draft Permit.

Response 15:

The statement "The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions," only has to appear once in each Facility Description Box. The Box in Section D.3 spans more than one page. However, the statement applies to all items in the box, regardless of the page. Therefore, there are no changes to the permit.

Comment 16:

Condition D.3.6 - The modifications to Condition D.3.6 are inaccurate and confusing. To clarify the relevant limitations, modify Condition D.3.6 as follows:

(a) Pursuant to First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

(1) PM and PM_{10} emissions from Blending Bins (EU13) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC5 and shall each not exceed 0.53 pounds per hour while exhausting from baghouse RMDC6.

(2) PM and PM_{10} emissions from Kiln Supply Silos (EU14) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC7 and shall each not exceed 0.53 pounds per hour while exhausting from baghouse RMDC8.

(3) PM and PM_{10} emissions from baghouse FDC1 controlling South Storage Drag (EU25) shall each not exceed 0.47 pounds per hour.

(4) The Finish Mill Surge Bin (EU37) shall be limited to 1,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(5) PM and PM_{10} emissions from baghouse FDC2 controlling North Clinker Tower (EU26A) shall each not exceed 1.76 pounds per hour.

(6) PM and PM_{10} emissions from baghouse FDC3 controlling South Clinker Tower (EU27) shall each not exceed 1.68 pounds per hour.

(7) PM and PM_{10} emissions from baghouse FDC4 controlling Hot Spout Clinker Ladder (EU28) shall each not exceed 1.76 pounds per hour.

(8) PM and PM_{10} emissions from baghouse FDC6 controlling East Clinker Ladder (EU30) shall each not exceed 1.21 pounds per hour.

(9) PM and PM_{10} emissions from baghouse FDC7 controlling Roll Crusher (EU31) shall each not exceed 1.84 pounds per hour.

(10) PM and PM_{10} emissions from baghouse FDC8, controlling Finish Mill #1 (EU32), shall each not exceed 1.42 pounds per hour.

(11) PM and PM_{10} emissions from baghouse FDC9 controlling Finish Mill #2 (EU33) shall each not exceed 1.42 pounds per hour.

(12) PM and PM_{10} emissions from baghouse FDC10 controlling Finish Mill #3 (EU34) shall each not exceed 1.42 pounds per hour.

(13) PM and PM_{10} emissions from baghouse FDC11 controlling Finish Mill #4 (EU35) shall each not exceed 0.64 pounds per hour.

(14) PM and PM_{10} emissions from baghouse FDC12 controlling Finish Mill #4 Separator (EU36) shall each not exceed 3.27 pounds per hour.

(15) The Lime Bin (EU38) shall be limited 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(16) PM and PM_{10} emissions from baghouse FDC14 controlling Lime Bin (EU38) shall each not exceed 0.22 pounds per hour.

(17) PM and PM_{10} emissions from baghouse FDC13 controlling Finish Mill Surge Bin (EU37) shall each not exceed 0.49 pounds per hour.

(18) PM and PM_{10} emissions from baghouse SDC1 controlling North Silo Operation (EU39A) shall each not exceed 1.77 pounds per hour.

(19) PM and PM_{10} emissions from baghouse SDC2 controlling South Silo Operation (EU39B) shall each not exceed 1.77 pounds per hour.

(20) PM and PM_{10} emissions from baghouse SDC3 controlling Silo Transfer - East (EU40A) shall each not exceed 0.57 pounds per hour.

(21) PM and PM_{10} emissions from baghouse SDC4 controlling Silo Transfer - West (EU40B) shall each not exceed 0.57 pounds per hour.

(22) PM and PM_{10} emissions from baghouse SDC5 controlling East Truck Loadout Bin (EU41) shall each not exceed 0.43 pounds per hour.

(23) PM and PM_{10} emissions from baghouse SDC7 controlling West Truck Loadout Bin (EU43) shall each not exceed 0.43 pounds per hour.

(24) PM and PM_{10} emissions from baghouse SDC6 controlling East Vaculoader (EU42) shall each not exceed 0.22 pounds per hour.

(25) PM and PM_{10} emissions from baghouse SDC8 controlling West Vaculoader (EU44) shall each not exceed 0.22 pounds per hour.

(26) The Railroad Loadout Bin (EU45) and the Articuloader (EU46) shall each be limited to 2,000 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(27) PM and PM_{10} emissions from baghouse SDC9 controlling Railroad Loadout Bin (EU45) shall each not exceed 0.71 pounds per hour.

(28) PM and PM_{10} emissions from baghouse SDC10 controlling Articuloader (EU46) shall each not exceed 0.21 pounds per hour.

(29) The Packing Machine (EU47) shall be limited to 5,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(b) Pursuant to Second Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon issuance:

(1) PM and PM_{10} emissions from baghouse KDC1 controlling Kiln #1 Feed Bin (EU18) shall each not exceed 0.49 pounds per hour.

(2) PM and PM_{10} emissions from baghouse KDC3 controlling Kiln #2 Feed Bin (EU20) shall each not exceed 0.49 pounds per hour.

(3) PM and PM_{10} emissions from baghouse FDC5 controlling Pan Conveyor (EU29) shall each not exceed 0.85 pounds per hour.

(4) PM and PM_{10} emissions from baghouse SDC11 controlling Packing Machine (EU14) shall each not exceed 0.92 pounds per hour.

(5) PM and PM_{10} emissions from baghouse SDC12 controlling Packing Machine (EU14) shall each not exceed 0.92 pounds per hour.

These limits will ensure that the PM and PM_{10} emissions increases from the 1979 pan clinker conveyor modification, the 1984 packing machine modification, the 1987 roll crusher modification, the 1989 finish mill #4 separator modification, the 1993 lime bin modification, and the modifications permitted in First Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Second Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed the PSD Major Modification significant thresholds of 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

Response 16:

See Response 11(c). There are no changes to the permit.

Comment 17:

Condition D.4.16(d) - The subsection numbers (4) and (5) (not the text) were corrected to read (3) and (4) in SPM Condition D.4.16(d), however, Condition D.4.16(d) was not included in the Conditions Affected section on the SPM Cover Page, nor was this correction to Condition D.4.16(d) included in the SSM.

Response 17:

The numbering had been corrected in this modification. Therefore, Condition D.4.16(d) has been added to the Significant Source Modification and the second box on the cover page of the Significant Permit Modification and the Significant Source Modification. The correction to Condition D.4.16(d) is as follows:

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

~~(4)~~ **(3)** The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).

~~(5)~~ **(4)** The Permittee shall keep records of the results of the inspections of the components of the combustion systems of kilns #1, #2, and #3, required by 40 CFR 63.1350 and Condition D.4.12(b), at least once per year.

Comment 18:

Section D.5 Facility Description Box – Facility description numbers for the Clinker Coolers #2 and #3 (not the text of the descriptions) were corrected to read (2) and (3), respectively in the SPM. However, the Facility Description for Section D.5 was not included in the Conditions Affected section on the SPM Cover Page, nor was this change included in the SSM.

Response 18:

The numbering in the Facility Description Box in Section D.5 had been corrected. Therefore, the Facility Description Box in Section D.5 has been added to the Significant Source Modification and the second box on the cover page of the Significant Permit Modification and the Significant Source Modification. The correction to the Facility Description Box in Section D.5 is as follows:

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 PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.

~~(1)~~ **(2)** One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.

~~(2)~~ **(3)** One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

Comment 19:

Condition D.5.8 – In the SPM, the subsection number for the second paragraph of Condition D.5.8 was corrected to read “(b)” instead of “(a).” However, Condition D.5.8 was not included in the Conditions Affected section on the SPM Cover Page, nor was this correction included in the SSM.

Response 19:

The numbering in Condition D.5.8 had been corrected. Therefore, Condition D.5.8 has been added to the Significant Source Modification and the second box on the cover page of the Significant Permit Modification and the Significant Source Modification. The correction to Condition D.5.8 is as follows:

D.5.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). 326 IAC 3-5 is not federally enforceable.

~~(a)~~ **(b)** The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

Comment 20:

Condition D.5.15 - The subsection numbers (d)(1) and (d)(2) were deleted from Condition D.5.15 in the SPM. However, Condition D.5.15(d) was not included in the Conditions Affected section on the Cover Page, nor was this change to Condition D.5.11 included in the SSM.

Response 20:

In reformatting and printing the entire updated permit, the numbering system for Condition D.5.15 was inadvertently changed. The condition has been revised in the Significant Permit Modification to match the previous version of the permit, as follows:

D.5.15 Record Keeping Requirements

(a) To document compliance with Conditions D.5.4, D.5.6, D.5.7, and D.5.8, the Permittee shall maintain records in accordance with (1) and (2) below.

(1) Data and results from the most recent stack test.

(2) All continuous emissions monitoring data.

(b) To document compliance with Condition D.5.11, the Permittee shall maintain records of the differential static pressure of each baghouse once per day.

(c) To document compliance with Condition D.5.12, the Permittee shall maintain records of the results of the inspections required under Condition D.5.12.

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).

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

Comment 21:

Condition D.7.1 – Condition D.7.1 is incorrect and misleading as currently written because not all of the facility/emission units that comprise "the calcium sulfate material facilities/emission units" are subject to 40 CFR Part 63, Subpart A. To clarify which facility/emission units are subject to 40 CFR Part 63, Subpart A, modify Condition D.7.1 as follows:

> Except when otherwise specified in 40 CFR Part 63, Subpart LLL, the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the following calcium sulfate material handling facilities/emission units: the synthetic gypsum hopper (F11); the raw material hopper (F13); the enclosed pugmill (EU49); and to the conveyor transfer points associated with the synthetic gypsum weight belt (F15), the raw material weight belt (F16), the main belt #1 (F17), and the main belt #2 (F18).

Response 21:

The requested change simplifies the condition without changing the intent or facilities listed. Therefore, Condition D.7.1 has been revised as follows:

D.7.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the **following** calcium sulfate material ~~facility~~ **facilities/emission units except when otherwise specified in 40 CFR Part 63, Subpart LLL:** ~~including~~ one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the ~~calcium sulfate material facility, including~~ one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18)~~, except when otherwise specified in 40 CFR Part 63, Subpart LLL~~.

Comment 22:

Condition D.7.2 – Condition D.7.2 is incorrect and misleading as currently written because not all of the facility/emission units that comprise "the calcium sulfate material facilities/emission units" are subject to 40 CFR § 63.1348. To clarify which facility/emission units are subject to 40 CFR § 63.1348, modify Condition D.7.2 as follows:

> Pursuant to 40 CFR 63.1348 (Emission Standards and Operating Limits), the visible emissions from the following calcium sulfate material facilities/emission units shall each not exceed ten percent (10%) opacity: the synthetic gypsum hopper (F11); the raw material hopper (F13); the enclosed pugmill (EU49); and the conveyor transfer points associated with the synthetic gypsum weight belt (F15), the raw material weight belt (F16), the main belt #1 (F17), and the main belt #2 (F18).

Response 22:

Condition D.7.2 has been revised as follows:

D.7.2 NESHAP Emissions Limitation [326 IAC 20-27] [40 CFR 63.1348]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), the visible emissions from the **following** calcium sulfate material ~~facility~~ **facilities/emission units shall each not exceed ten percent (10%) opacity:** ~~including~~ one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the

~~calcium sulfate material facility, including~~ one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18~~), shall not exceed ten percent (10%) opacity~~.

Comment 23:

Condition D.7.3 – Consistent with the comments above, the second phrase of Condition D.7.3 should be modified as follows: "… the allowable particulate emission rates from the following calcium sulfate material facilities/emission units shall not exceed the following." In addition, please replace the table in D.7.3 with the following:

Process	**Process Weight Rate (tons/hr)**	**Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)**
Synthetic Gypsum Hopper (F11)	60	46.3
Synthetic Gypsum Weight Belt (F15)	60	46.3
Raw Material Hopper (F13)	60	46.3
Raw Material Weight Belt (F16)	60	46.3
Main Belt #1 (F17)	100	51.3
CKD Silo (EU48)	50	44.6
Pugmill (EU49)	100	51.3
Main Belt #2 (F18)	100	51.3

Response 23:

The requirements of 326 IAC 6-3-2 apply to each manufacturing process. The definition of process in 326 IAC 1-2-58 is "Any action, operation, or treatment and the equipment used in connection therewith, and all methods or forms of manufacturing or processing that may emit air contaminants." The IDEM, OAQ has historically viewed processes as groups of equipment that are physically connected and perform a similar function. Therefore, the calcium sulfate material facilities/emission units are all part of a single process, and they will be given a single limit applicable to the total of all emission units. Based upon the calculations in Appendix A of this document, the process will comply with this rule. Condition D.7.3 has been revised as follows:

D.7.3 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 the calcium sulfate material ~~facility~~ **facilities/emission units** shall not exceed ~~the following:~~ **51.3 pounds per hour, total, when operating at a process weight rate of 100 tons per hour.**

~~Process~~	~~Process Weight Rate (tons/hr)~~	~~Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)~~
~~Input to Synthetic Gypsum Storage Piles (F10)~~	~~60~~	~~46.3~~
~~Input to Raw Materials Storage Piles (F12)~~	~~60~~	~~46.3~~
~~Input to Synthetic Gypsum Hopper (F11)~~	~~60~~	~~46.3~~
~~Input to Synthetic Gypsum Weight Belt (F15)~~	~~60~~	~~46.3~~
~~Input to Raw Material Hopper (F13)~~	~~60~~	~~46.3~~

~~Process~~	~~Process Weight Rate (tons/hr)~~	~~Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)~~
~~Input to Raw Material Weight Belt (F16)~~	~~60~~	~~46.3~~
~~Input to Main Belt #1 (F17)~~	~~100~~	~~51.3~~
~~Input to CKD silo (EU48)~~	~~50~~	~~44.6~~
~~Input to Pugmill (EU49)~~	~~100~~	~~51.3~~
~~Input to Main Belt #2 (F18)~~	~~100~~	~~51.3~~
~~Input to Outdoor calcium sulfate material storage pile (F14)~~	~~100~~	~~51.3~~
~~Input to Storage Building~~	~~100~~	~~51.3~~
~~Pile Movement~~	~~100~~	~~51.3~~

The pounds per hour limitation~~s~~ ~~were~~ **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:

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

Comment 24:

Condition D.7.4 –To clarify the relevant limitations, modify the first and last paragraphs of Condition D.7.4 as follows:

> Pursuant to Significant Permit Modification 093-18649-00002 issued in 2004, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon issuance …

These limits will ensure that the PM and PM_{10} emissions increase from the modifications permitted in Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed the PSD Major Modification significant thresholds of 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) is not applicable to this modification.

Response 24:

The requested changes cannot be made to the last paragraph for the reasons specified in Response 11(c). However, in response to the comment on the first paragraph, Condition D.7.4 has been revised as follows:

D.7.4 PSD Minor Limit [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-18649-00002, issued in 2004, the **following conditions shall apply upon issuance:** ~~PM and PM_{10} emissions from the one (1) proposed calcium sulfate material facility is limited as follows:~~

(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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(h) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(i) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

(j) 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 PM_{10} emissions shall not exceed 0.0057 pounds per ton of material input.

These limits will ensure that the PM and PM_{10} emissions increase from the modifications permitted in Significant Permit Modification 093-16851-00002 issued on July 11, 2003, and Significant Permit Modification 093-18649-00002 issued in 2004 will not exceed 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these modifications.

Comment 25:

Condition D.7.5 – Pursuant to 326 IAC 1-6-3(a), Lehigh is required to prepare and maintain a PMP regarding “inspecting, maintaining, and repairing emission control devices.” Condition D.7.5 should

be modified to only require a PMP for RMDC5. In any event, consistent with Condition B.11, if an Operations and Maintenance Plan has been developed, it shall satisfy the requirement to have a PMP. As such, modify Condition D.7.5 as follows:

> A Preventative Maintenance Plan, in accordance with Section B – Preventative Maintenance Plan, of this permit, is required for RMDC5. If the Operation and Maintenance Plan (OMP) required by Condition D.7.7 is developed in accordance with Section B – Preventative Maintenance Plan, then once the OMP has been developed, it shall satisfy this condition.

Response 25:

The Preventive Maintenance Plan rule, 326 IAC 1-6-3, sets out the requirements for:

(1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),

(2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and

(3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(3)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. Pursuant to 326 IAC 1-6-3(b), as deemed necessary by the commissioner, any person operating a facility required to obtain a permit under 326 IAC 2-7 shall comply with the requirements of subsection 326 IAC 1-6-3(a). Therefore, Condition D.7.5 shall remain unchanged.

Comment 26:

Condition D.7.6 – To clarify the requirement in Condition D.7.6, modify the first phrase as follows:

> Within 180 days after startup of the synthetic gypsum hopper (F11); the raw material hopper (F13); the enclosed pugmill (EU49); and the conveyor transfer points associated with the synthetic gypsum weight belt (F15), the raw material weight belt (F16), the main belt #1 (F17), and the main belt #2 (F18), the Permittee shall …

Response 26:

Condition D.7.6 has been revised as follows:

D.7.6 NESHAP Testing Requirements [326 IAC 20-27] [40 CFR 63.1349]

Within 180 days after startup **of the one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18)**, the Permittee shall demonstrate initial compliance with the opacity limits established in Condition D.7.2 by conducting performance tests in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A.

Comment 27:

Condition D.7.7(b)(5) – Delete the last sentence of Condition D.7.7(b)(5) because it is duplicative of Conditions D.7.7(a) and the last sentence of Condition D.7.7.

Response 27:

Condition D.7.7(b)(5) is now Condition D.7.9(b)(5) (see Response 38). Condition D.7.9(b)(5) specifically defines "Totally enclosed conveying system transfer point" and has not been removed from the permit. However, Condition D.7.8 has been revised as follows:

D.7.9 NESHAP Monitoring Requirements [326 IAC 20-27] [40 CFR 63.1350]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the **following** calcium sulfate material ~~facility~~ **facilities/emission units:** ~~including~~ **the** one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the ~~calcium sulfate material facilities, including~~ one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18), upon startup. The plan shall include the following information:

(a) Procedures for proper operation and maintenance of the affected sources in order to meet the emissions limit in the rule; and

(b) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

(1) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source, in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

(2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee 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 Permittee shall 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.

(3) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee 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 Permittee shall 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.

(4) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

(5) 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.

(6) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (1) through (4) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (7) below.

(7) If visible emissions from a building are monitored, the requirements of paragraphs (1) through (4) of this section apply to the monitoring of the building, and the Permittee shall 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.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

Comment 28:

Condition D.7.8(b) – Delete the last sentence of Condition D.7.8(b) because it is duplicative. Additionally, to clarify for which facility/emission units Lehigh must keep material input records, modify Condition D.7.8(b) as follows:

To document compliance with Condition D.7.4, the Permittee shall maintain records of the material input to: the storage piles (F10 and F12); the synthetic gypsum hopper (F11); the synthetic gypsum weight belt (F15); the raw material hopper (F13); the raw material weight belt (F16); the main belt #1 (F17); the CKD storage silo (EU48); the enclosed pugmill (EU49); the main belt #2 (F18); and the outdoor partially enclosed calcium sulfate material storage pile (F14).

Response 28:

This condition is now Condition D.7.11 (see Response 38 and Change 1 at the end of this document). The final sentence of Condition D.7.11(b) is a specific record keeping requirement and has not been removed from the permit. Condition D.7.11 has been revised as follows:

D.7.~~8~~**11** Record Keeping Requirements [326 IAC 20-27] [40 CFR 63.1355]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(b) To document compliance with Condition D.7.4, the Permittee shall maintain records of the material input to each process at the calcium sulfate material ~~facility~~ **facilities/emission units.** Records shall be complete and sufficient to demonstrate compliance with Condition

D.7.4.

(c) To document compliance with Condition D.7.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

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

Comment 29:

Condition D.7.9(a)(1) – To clarify the requirement, modify the last phrase of Condition D.7.9(a)(1) as follows: … upon startup of the synthetic gypsum hopper (F11); the raw material hopper (F13); the enclosed pugmill (EU49); and the conveyor transfer points associated with the synthetic gypsum weight belt (F15), the raw material weight belt (F16), the main belt #1 (F17), and the main belt #2 (F18).

Response 29:

This condition is now Condition D.7.12 (see Response 38 and Change 1 at the end of this document), and has been revised as follows:

D.7.~~9~~**12** Reporting Requirements [326 IAC 20-27] [40 CFR 63.1354]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

(1) The plan required by 40 CFR 63.1350 shall be submitted to IDEM, OAQ and U.S. EPA upon startup **of the one (1) synthetic gypsum hopper (F11), one (1) raw material hopper (F13), and one (1) enclosed pugmill (EU49); and the conveyor transfer points associated with the one (1) synthetic gypsum weight belt (F15), one (1) raw material weight belt (F16), one (1) main belt #1 (F17), and one (1) main belt #2 (F18).**

(2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status,

(3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee 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 40 CFR 63.6(e)(3), the Permittee 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.

(5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee 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 Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, 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.

(b) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

(c) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports required by this section and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Comment 30:

Technical Support Document – The Technical Support Document for the SSM and SPM needs to be modified by addenda consistent with these comments and consistent with the SSM and SPM.

Response 30:

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Comment 31:

Technical Support Document, page 3 – The last sentence included in the last subsection (mistakenly labeled (b)) under the heading Enforcement Issue is incorrect. The Notice of Violation issued by the U.S. EPA applies only to Kilns #1 and #2. Kiln #3 is not subject to the Notice of Violation. Additionally, it is incorrect to state that the source is in violation of Prevention of Significant Deterioration (“PSD”). The U.S. EPA alleged PSD violations; however Lehigh does not believe it violated the PSD requirements. Although the initial test results for carbon monoxide (“CO”) were above the permit limit, Lehigh did not violate Indiana's PSD State Implementation Plan (“SIP”) and the federal PSD provisions, nor will it as a result of the period of elevated emissions. Under both the federal and Indiana PSD definitions, a "net emissions increase," is an increase that results from the physical change at a source that occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational, by regulatory definition, only after a reasonable shakedown period, not to exceed one hundred eighty days (180) days. 40 CFR § 52.21(b)(3)(viii), 326 IAC 2-2-1(cc). During shakedown, any exceedances of the CO permit limit do not apply in determining whether a net emissions increase has occurred. Lehigh's December 2003 stack tests fell within this shakedown period and therefore do not indicate a PSD permit violation both because the kilns were not yet "operational" for purposes of the netting analysis at the time of that test and because a PSD violation could only occur if elevated emissions continued long enough to result in a net significant increase in CO. Lehigh has now resolved the short period of elevated CO emissions and did not violate PSD

requirements.

Page 3 of the TSD should be amended to delete the last sentence included in the last subsection (mistakenly labeled (b)) under the heading Enforcement Issue, so that it only references that a Notice of Violation was issued by the U.S. EPA in April 2004.

Response 31:

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The comment is noted, and has been forwarded to the Enforcement Section for review.

Comment 32:

Technical Support Document, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) – Please see the attached "326 IAC 2-2 (Prevention of Significant Deterioration (PSD))" from the Technical Support Document (pages 9-13) with Lehigh's correction.

(The correction requested is the removal of the CKD silo from the list of limited emission units.)

Response 32:

Although the CKD silo is an existing unit with an existing control device, the CKD silo is also part of this modification since it is upstream of the process and will operate in series with the facilities in this modification. If the unit is not limited, its maximum unrestricted potential to emit will need to be added to this modification for the purpose of addressing 326 IAC 2-2, PSD, applicability. Therefore, there are no changes to the permit.

Comment 33:

Technical Support Document, Appendix A – Please see the attached Appendix A from the Technical Support Document with Lehigh's corrections.

(The comment is that the CKD to the pugmill is enclosed, while the synthetic gypsum and raw material to the pugmill is not enclosed. Also, the CKD silo is existing, as is the baghouse.)

Response 33:

IDEM, OAQ, has noted that the CKD to the pugmill is enclosed, while the synthetic gypsum and raw material to the pugmill is not enclosed. There is no increase in the potential emissions of the modification resulting from this change. There are also no changes to the limitations since both are inputs to the pugmill. The total input is still limited by the permit.

Applicant's Introduction to Comments 34 through 60:

Since the IDEM has recommended changes to Lehigh's Part 70 Operating Permit beyond the scope of Lehigh's calcium sulfate material facility/emission units modification application; Lehigh has also included the following comments in an effort to decrease the number of issues remaining to be addressed in Lehigh's appeal of its initial Part 70 Operating Permit and its First Significant Source Modification and First Significant Permit Modification.

Comment 34:

Condition B.11(b) - Condition B.11(b) requires implementation of required Preventative Maintenance Plan ("PMP") record keeping, but fails to include the specific record keeping requirements for the PMP. Additionally, Condition C.20 requires all records of all required monitoring data, reports, and support information required by the Permit be retained for at least five (5) years, but fails to set forth the record keeping requirements for PMPs. The Permit must clearly identify the PMP record keeping requirements or expressly indicate that the applicable requirement is the record keeping described in the PMP. As such, modify Condition B.11(b) as follows:

> The Permittee shall implement the PMPs, including records of maintenance supporting monitoring data as required by Section D of this Permit, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

Response 34:

The first sentence of Condition C.20 is "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." Those general record keeping requirements include the record keeping requirements for the PMP. To clarify, Condition C.20 has been revised as follows:

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports, and support information required by this Permit**, including any record keeping required by the Preventive Maintenance Plan,** shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

Comment 35:

Condition B.11(d) – To clarify that Lehigh's Operation and Maintenance Plan (OMP) satisfies the PMP requirements, modify Condition B.11(d) as follows:

For the emission units required to have an Operation and Maintenance Plan (OMP) pursuant to 40 CFR Parts 60 and 63, such OMP is deemed to satisfy the Preventative Maintenance Plan (PMP) requirements of 326 IAC 1-6-3 and Condition B.11 and that the OMP requirements shall be the applicable requirements for maintenance.

Response 35:

Condition B.11(d) states, "To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit." The OMP only requires response actions for the monitoring parameters required by the NESHAP, and only addresses pollutants regulated by the NESHAP. Therefore, there are no changes to Condition B.11(d).

Comment 36:

Condition B.13(a) - Consistent with 40 CFR Part 70 and the Preamble thereto, the IDEM must make a determination on the applicability of state and federal laws and regulations and a determination of Lehigh's obligations. As such, the third sentence of Condition B.13(a) should also state that the federal statutes from the Clean Air Act (CAA) and the federal rules from 40 CFR referenced in the Permit are those applicable at the time the Initial Part 70 Operating Permit or subsequent modification was issued, as the case may be.

Response 36:

The definition of "applicable requirements" addresses these concerns. Therefore, Condition B.13(a) has been revised as follows:

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. **The term "applicable requirements" shall have the meaning set forth in 326 IAC 2-7-1(6).** ~~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.

Comment 37:

Condition C.7 - Any permit condition based on a rule and/or portions of a rule which have not been approved by the U.S. EPA as a revision to the Indiana State Implementation Plan ("SIP") is not federally enforceable and the condition must specifically state that the condition is not federally enforceable as required by 326 IAC 2-7-5(1)(E). The following rules do not appear to have been incorporated into the U.S. EPA's approved SIP: 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). As such, modify Condition C.7 as follows:

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.

Response 37:

Condition C.7 has been revised as follows:

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

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

Comment 38:

Condition C.11 - The first sentence of Condition C.11 states that, unless otherwise specified, all monitoring requirements not already legally required shall be implemented within 90 days of the original Part 70 issuance. Lehigh's Initial Part 70 Operating Permit was issued on December 30, 2002, therefore, it is impossible to implement the new monitoring requirements added through this Significant Permit Modification within 90 days of the Initial Part 70 Operating Permit issuance, because said date has already passed. As such, the Permit fails to include an implementation schedule for any new monitoring requirements not already legally required. Modify the first sentence of Condition C.11 as follows:

> Unless otherwise specified in this permit, all monitoring requirements not already legally required shall be implemented: within ninety (90) days of the issuance of the initial Title V Permit; for any new monitoring requirement included as part of the Significant Source Modification No. 093-15822 or Significant Permit Modification No. 093-16851-00002, upon startup of the Preheater Kilns #1 and #2; or for any new monitoring requirements included as part of Significant Source Modification No. 093-19158-00002 or Significant Permit Modification No. 093-18649-00002, upon startup of the calcium sulfate material facility emission units.

Additionally, consistent with applicable law and due process, the Permit should not attempt to regulate future approvals by the IDEM. Accordingly, delete the last sentence of Condition C.11, which states that unless otherwise specified in the approval, compliance monitoring conditions for new or modified facilities/emission units added through a source modification shall be implemented when operations begin.

Response 38:

Condition C.11 is unchanged from the original Part 70 Operating Permit. Therefore, the condition refers to monitoring requirements in that permit. Since the proposed modification will be regulated by the proposed source modification and permit modification, the following Condition has been added to the permit, and the remainder of Section D.7 has been renumbered accordingly:

D.7.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

All monitoring and record keeping requirements in this section shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Comment 39:

Condition C.12(b) – Condition C.12(b) assumes that Lehigh will always know the reason for the breakdown, which may not be ascertainable. Because Condition B.10 requires Lehigh to certify compliance with this Condition, modify Condition C.12(b) as follows:

> The Permittee shall record the times and reasons (if known) of the breakdown of the continuous opacity monitoring equipment and the efforts made to correct the problem.

Response 39:

Although the Permittee may not know the specific reason for the breakdown, the Permittee must make a record that it is unknown and should include any possible reasons. There is no change to this condition.

Comment 40:

Condition D.1.1 - This condition is in error. The minor source modification 093-11313 cited in Condition D.1.1(b) governs only the CKD Mixer (EU24B) and the CKD truck loadout (F07). Thus, minor source modification 093-11313 is not the underlying applicable authority for all of the other emission units contained in Condition D.1.1(b). Additionally, although the correct limit is cited in Condition D.1.1(b), the wrong equation is cited. Consistent with 326 IAC 6-3-2, Condition D.1.1(b) should reference the equation found in Condition D.1.1(a) because the process weights of the listed facilities/emission units in Condition D.1.1(b) are in excess of 60,000 pounds per hour. As such, modify Condition D.1.1(b) as follows:

> Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and minor source modification 093-11313 issued November 9, 1999 (with respect to the cement kiln dust (CKD) mixer (EU24B)), the allowable particulate emission rate from the CKD bin (EU24), the CKD truck loading system (EU24A) and the CKD mixer (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 limitation was 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:
>
> $E = 55.0\ P^{0.11} - 40$ where: E = rate of emission in pounds per hour
> P = process weight rate in tons per hour

Response 40:

Condition D.1.1(b) has been revised as follows:

(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 limitation was calculated with the following equation:

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

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

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:

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

Comment 41:

Condition D.1.5 - This condition is in error. The minor source modification 093-11313 cited in Condition D.1.5 governs only the CKD Mixer (EU24B) and the CKD truck loadout (F07). Thus, minor source modification 093-11313 is not the underlying applicable authority for all of the other emission

units contained in Section D.1. As such delete "Pursuant to minor source modification 093-11313 issued November 9, 1999," from Condition D.1.5.

Response 41:

Condition D.1.5 has been revised as follows:

D.1.5 Particulate Control

Pursuant to minor source modification 093-11313 issued November 9, 1999, **for the CKD mixer (EU24B), and in order for all units to comply with Conditions D.1.1 and D.1.3,** except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation~~, in order to comply with Conditions D.1.1 and D.1.3~~.

Comment 42:

Condition D.2.8 - The second sentence of Condition D.2.8 incorrectly references Condition D.2.12. Instead this condition should reference Condition D.2.11.

Response 42:

Condition D.2.8 has been revised as follows:

D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section. If the Operations and Maintenance Plan required by Condition ~~D.2.12~~ **D.2.11** is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Comment 43:

Condition D.2.11(a) – Condition D.2.11(a) should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with the NESHAP. Modify Condition D.2.11 as follows:

> Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee prepared and submitted its Operations and Maintenance Plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12, and EU12A). Pursuant to 40 CFR 63.1350, the plan shall include the following …

Response 43:

The requirements of Condition D.2.11 were included in a previous permit and has not been changed in this modification. If Lehigh Cement Company already submitted its Operation and Maintenance Plan, then the source is in compliance with Condition D.2.11(a). There is no need to revise the permit.

Comment 44:

Condition D.2.17(a)(1) – This condition should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with 40 CFR § 63.1350. Modify Condition D.2.17(a)(1) as follows:

. . . Portland Cement Manufacturing Industry. The Permittee already prepared and submitted its Operations and Maintenance Plan to the IDEM and U.S. EPA in accordance with 40 CFR 63.1350.

Response 44:

See Response 43.

Comment 45:

Condition D.3.8 - Condition D.3.8(b) is incorrect and should specify that the stack testing is to demonstrate compliance with D.3.1(k), (l), (m), and (n) rather than Conditions D.3.1(k), (l), (m), (n), and (o).

Response 45:

Since Condition D.3.1(o) refers to an emissions unit for which testing is not specifically required by Condition D.3.8, Condition D.3.8(b) has been revised as follows:

(b) Within 60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2, in order to demonstrate compliance with Condition D.3.1(k), (l), (m), (n), ~~(o)~~ and D.3.6, the Permittee shall perform PM and PM_{10} 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). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

Comment 46:

Condition D.3.9 – Condition D.3.9 is in error. The Construction Permit, CP 093-2770 issued March 3, 1993, referenced in Condition D.3.9 governs only the three clinker ladders (EU26c, EU28 and EU30) and lime bin (EU38). It does not impose any requirements on the baghouses for all the other facilities/emission units listed in Section D.3. and should, therefore, not be cited as authority for all of the requirements included in Condition D.3.9.

Response 46:

Condition D.3.9 has been revised as follows:

D.3.9 Particulate Control

Pursuant to CP093-2770 issued March 3, 1993, **for the three clinker ladders (EU26c, EU28 and EU30 and the lime bin (EU38), and in order for all units to comply with Conditions D.3.1, D.3.4 and D.3.6,** except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation~~, in order to demonstrate compliance with Conditions D.3.1, D.3.4, and D.3.6~~.

Comment 47:

Condition D.3.10 - Condition D.3.10(a) should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with the NESHAP. Modify Condition D.3.10(a) as follows:

> Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee prepared and submitted its Operations and Maintenance Plan for the . . . bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06). Pursuant to 40 CFR 63.1350, the plan shall include the following . . ..

Response 47:

See Response 43.

Comment 48:

Condition D.3.16(a)(1) - This condition should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with 40 CFR § 63.1350. Modify Condition D.3.16(a)(1) as follows:

> . . . Portland Cement Manufacturing Industry. The Permittee already prepared and submitted its Operations and Maintenance Plan to the IDEM and U.S. EPA in accordance with 40 CFR § 63.1350.

Response 48:

See Response 43.

Comment 49:

Condition D.4.5 - The last sentence of Condition D.4.5 contains incorrect citations. Said condition states that ". . . 40 CFR 63.8, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64." Modify the last sentence of Condition D.4.5 as follows:

> IDEM has determined that compliance with the monitoring requirements of 40 CFR § 63.8 and 40 CFR Part 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfy the monitoring requirements of 40 CFR Part 64.

Response 49:

Condition D.4.5 has been revised as follows:

D.4.5 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

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 SO_2 is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions D.4.1 and D.4.2. A CAM plan was received from the source on December 19, 2002. IDEM has determined that compliance with the monitoring requirements of 40 CFR 63.8~~(c),~~ **and 40 CFR 63,** Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), ~~satisfies~~ **satisfy** the monitoring requirements of 40 CFR 64.

Comment 50:

Condition D.4.7(b) – The preheater modification for Kilns #1 and #2 was a physical modification and change in the method of operation. The modifications to the existing long dry kilns to make them preheater kilns did not constitute a change in the feed or fuel requiring NESHAP repeat stack testing

within ninety (90) days of startup of the Preheater Kilns #1 and #2 [40 CFR § 63.1349(e)]. In any event, 40 CFR § 63.7 is not the authority which requires repeat testing within ninety (90) days of initiating a significant change in the feed or fuel that may adversely affect compliance with the applicable dioxin/furans or particulate matter limits. Pursuant to 40 CFR § 63.7, the Permit should have required repeat PM and dioxin/furans performance testing within one hundred and eighty (180) days of the startup of Preheater Kilns #1 and #2. Modify Condition D.4.7(b) as follows:

> Pursuant to 40 CFR § 63.7, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans for Kilns #1 (EU15) and #2 (EU16) within 180 days of startup of the Preheater Kilns #1 and #2.

Response 50:

IDEM, OAQ, had determined that the modification permitted in first significant source modification (093-15822) was issued on June 24, 2003, and first significant permit modification 093-16851-00002, issued on July 11, 2003, may adversely affect compliance with an applicable D/F and PM standards under Subpart LLL. Therefore, testing was required within 90 days of start-up. In order to clarify that 40 CFR 63.7 is not the authority for testing within 90 days, Condition D.4.7(b) has been revised as follows:

D.4.7 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

(a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM shall be repeated at least once every five 5 years and the tests for dioxin/furans shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test that may adversely affect compliance with the applicable particulate matter or dioxins/furans limits. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.

(b) Pursuant to 40 CFR ~~63.7~~ **63.1349**, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of startup of preheater Kilns #1 and #2.

Comment 51a:

Condition D.4.10(b) – Any permit condition based on a rule and/or portions of a rule which have not been approved by the U.S. EPA as a revision to the SIP is not federally enforceable and the condition must specifically state that the condition is not federally enforceable as required by 326 IAC 2-7-5(1)(E). The following rules do not appear to have been incorporated into the U.S. EPA's approved SIP: 326 IAC 7-1.1; 326 IAC 7-2-1; 326 IAC 3-4; 326 IAC 3-5; 326 IAC 3-6; and 326 IAC 3-7. Include 326 IAC 7-1.1; 326 IAC 7-2-1; 326 IAC 3-4; 326 IAC 3-5; 326 IAC 3-6; and 326 IAC 3-7 are not federally enforceable at the end of Condition D.4.10. Note, the Response to Comments section of Lehigh's Addendum to its TSD for its Initial Part 70 Permit # 73 states that the requested change was made to Lehigh's Initial Part 70 Permit; however, the language was never included in the Part 70 Permit.

Response 51a:

Conditions D.4.10 and D.4.11 have been revised to specify the rules cited by those conditions that are not federally enforceable, as follows:

D.4.10 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [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, 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)]

326 IAC 3-5, 326 IAC 3-6 and 326 IAC 3-7 are not federally enforceable.

D.4.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from the stacks associated with each of the kilns (S-KP1 and S-KP2), pursuant to 326 IAC 3-5-2 and 40 CFR 63.8(c). The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Condition D.4.7. The continuous

opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

326 IAC 3-5 is not federally enforceable.

Comment 51b:

Condition D.4.10(b) should also clarify that there are only two (2) stack exhausts for the three kilns as follows:

Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the kiln stack exhausts, S-KP1 or S-KP2 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)]

Response 51b:

Condition D.4.10(b) is one option available for demonstrating compliance with the sulfur dioxide emission limit. It is noted that there are two (2) stacks, S-KP1 or S-KP2, for the three (3) kilns. Testing would be required for stack S-KP1 in order to demonstrate compliance with the emission limit for Kiln 1 and Kiln 2 and testing would be required for stack S-KP2 in order to demonstrate compliance for Kiln 3. There are no changes to the condition as a result of this comment.

Comment 52:

Condition D.4.12(a) - Condition D.4.12(a) should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with the NESHAP. Modify the first two sentences of Condition D.4.12(a) as follows:

> Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee prepared and submitted its Operations and Maintenance Plan for Kilns #1, #2, and #3 (EU15, EU16, and EU17). Pursuant to 40 CFR 63.1350, the plan shall include the following information . . ..

Response 52:

See Response 43.

Comment 53:

Condition D.4.16(c) - The first sentence of Condition D.4.16(c) contains an incorrect reference to D.4.12. Said sentence should reference D.4.13 rather than D.4.12.

Response 53:

Condition D.4.16(c) has been revised as follows:

(c) To document compliance with Conditions D.4.4, D.4.7, D.4.8, D.4.11, ~~D.4.12,~~ **D.4.13,** D.4.14, and D.4.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.13, D.4.14, and D.4.15.

(1) Data and results from the most recent stack test.

(2) All continuous emissions monitoring data.

(3) All ESP total power readings.

(4) The results of all ESP inspections and the type and number of parts replaced.

(5) All preventive maintenance measures taken.

(6) All response steps taken and the outcome for each.

Comment 54:

Condition D.4.16(e) – Condition D.4.16(e) is overly broad and confusing as written. It needs to be modified to include "for Preheater Kilns #1 and #2" prior to the word "requirements" to clarify that the record keeping requirements listed in the condition only apply to the Preheater Kilns #1 and #2.

Response 54:

Condition D.4.16(e) has been modified as follows:

(e) To document compliance with 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.

Comment 55:

Condition D.4.16(f) – Condition D.4.16(f) contains the record keeping requirements for the clinker production limit on the Preheater Kilns #1 and #2. As such, Condition D.4.16(f) should cite to the clinker production limit contained in D.4.1(a) rather than to Condition D.4.1 in its entirety.

Response 55:

Condition D.4.16(f) has been revised as follows:

(f) To document compliance with Condition D.4.1**(a)**, the Permittee shall maintain records of the Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16).

Comment 56:

Condition D.4.17(d)(1) - This condition should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with 40 CFR § 63.1350. Modify Condition D.4.17(d)(1) as follows:

. . . Portland Cement Manufacturing Industry. The Permittee already prepared and submitted its Operations and Maintenance Plan to the IDEM and U.S. EPA in accordance with 40 CFR § 63.1350.

Response 56:

See Response 43.

Comment 57:

Condition D.4.17(g) - Condition D.4.17(g) contains the record keeping requirements for the clinker production limit on the Preheater Kilns #1 and #2. As such, Condition D.4.17(g) should cite to the clinker production limit contained in D.4.1(a) rather than to Condition D.4.1 in its entirety.

Response 57:

Condition D.4.17(g) has been revised as follows:

(g) A quarterly summary of the information to document compliance with Condition D.4.1**(a)** shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Comment 58:

Condition D.5.7 - The first sentence of Condition D.5.7 is unclear as written. Said sentence references the repeat performance testing requirements required as a result of the preheater modifications, but fails to specify which clinker coolers are subject to said requirements. Because the preheater modification only involves Kilns #1 and #2, and not Kiln #3, the first sentence of Condition D.5.7 should only require repeat PM and PM_{10} performance testing of clinker coolers #1 and #2. Additionally, since Condition D.5.1 does not apply to Clinker Cooler #3, the third sentence of Condition D.5.7 which requires stack testing for all three clinker coolers is in error. Correct Condition D.5.7 as follows:

> The Permittee shall demonstrate compliance with the PM and PM_{10} limits established in Condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2, by conducting performance tests for PM and PM_{10} from Clinker Coolers #1 and #2, utilizing methods as approved by the Commissioner. Testing should be conducted in accordance with Section C-Performance Testing. The PM and PM_{10} tests for Clinker Coolers #1 and #2 shall be conducted every 2.5 years. PM_{10} includes filterable and condensable PM_{10}.

Response 58:

Condition D.5.1 does not regulate Clinker Cooler #3. That clinker cooler must still perform testing as required by Condition D.5.6. Condition D.5.7 is revised as follows:

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall demonstrate compliance with the PM and PM_{10} limits established in condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2, by conducting performance tests for PM and PM_{10} from ~~clinker coolers~~ **Clinker Cooler #1 and Clinker Cooler #2**, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. The**se** PM and PM_{10} tests ~~for all three Clinker Coolers~~ shall be conducted every 2.5 years. PM_{10} includes filterable and condensible PM_{10}.

Comment 59:

Condition D.5.10(a) - Condition D.5.10(a) should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with the NESHAP. Modify the first and second sentences of Condition D.5.10(a) as follows:

> Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee prepared and submitted its Operations and Maintenance Plan for the Clinker Coolers #1, #2 and #3 (EU19, EU21, EU23). Pursuant to 40 CFR 63.1350, the plan shall include the . . . .

Response 59:

See Response 43.

Comment 60:

Condition D.5.16(d)(1) - This condition should acknowledge that Lehigh already submitted its Operation and Maintenance Plan to the IDEM and the U.S. EPA in accordance with 40 CFR § 63.1350. Modify Condition D.5.16(d)(1) as follows:

> . . . Portland Cement Manufacturing Industry. The Permittee already prepared and submitted its Operations and Maintenance Plan to the IDEM and U.S. EPA in accordance with 40 CFR § 63.1350.

Response 60:

See Response 43.

Upon further review, the OAQ has decided to make the following changes to the Significant Source Modification to a Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is bolded):

Change 1:

IDEM, OAQ, has determined that visible emission notations are also required for the calcium sulfate material facilities/emission units in order to ensure continuous compliance with the emission limitations and standards in the permit. The visible emissions tests in 40 CFR 63, Subpart LLL, are not required frequently enough to ensure that the emissions units are in continuous compliance with the emissions limitations of 326 IAC 6-3-2 and the limitations that make 326 IAC 2-2, PSD, not applicable. Therefore, Condition D.7.10 has been added to the permit, as follows, and the remainder of Section D.7 has been renumbered accordingly:

D.7.10 Visible Emissions Notations

(a) Visible emission notations of 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 shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible

emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.7.~~8~~**11** Record Keeping Requirements [326 IAC 20-27] [40 CFR 63.1355]

(a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:

(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

(2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

(A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

(B) All records of applicability determination, including supporting analyses.

(b) To document compliance with Condition D.7.4, 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.7.4.

(c) To document compliance with Condition D.7.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) To document compliance with Condition D.7.10, the Permittee shall maintain records of visible emission notations of 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 once per shift.

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

Change 2:

In order to ensure that the proposed facilities comply with 326 IAC 6-3-2, the following condition has been added to the permit, and all conditions in Section D.7 have been renumbered accordingly:

D.7.7 Particulate Control

In order to comply with condition D.7.3, the baghouse for particulate control shall be in operation and control emissions from the CKD storage silo, identified as EU48, at all times that the CKD storage silo is in operation.

Appendix A: Emission Calculations
Synthetic Gypsum Blending
Unrestricted Potential Emissions

Company Name: Lehigh Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Source Modification Number: 093-19158
Permit Modification Number: 093-18649
Plant ID: 093-00002
Reviewer: CarrieAnn Paukowits
Date: May 11, 2004

PM

Storage			** see below **				0.02	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Aggregate Dropping (to synthetic gypsum storage pile)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum hopper)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum weigh belt)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material storage pile)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material hopper)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material weigh belt)	60.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	3.17	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #1)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #1; transfer point enclosed)	enclosed	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to CKD silo)	50.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.64	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #2; transfer point enclosed)	enclosed	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (synthetic gypsum and raw material to pugmill)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to pugmill)	enclosed	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #2)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage building)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (pile movement by cranes)	100.0	tons/hr x	0.0121	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	5.29	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Total emissions before controls:							53.45	tons/yr	

PM-10

Storage			** see below **				0.02	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Aggregate Dropping (to synthetic gypsum storage pile)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum hopper)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum weigh belt)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material storage pile)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material hopper)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material weigh belt)	60.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #1)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #1; transfer point enclosed)	enclosed	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to CKD silo)	50.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	1.25	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #2; transfer point enclosed)	enclosed	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (synthetic gypsum and raw material to pugmill)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to pugmill)	enclosed	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #2)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage building)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (pile movement by cranes)	100.0	tons/hr x	0.0057	lb/ton	x 8,760 hrs/yr	/ 2000 lb/ton =	2.50	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Total emissions before controls:							25.29	tons/yr	

*** * aggregate handling emission factor * ***

The following calculations determine the amount of emissions created by dropping of material, based on 8760 hours of use and AP-42 13.2.4 (Fifth edition, 1/95).

PM

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0121 lb/ton
where k = 0.74 (particle size multiplier)
U = 8.3 mile/hr mean wind speed
M = 1 % material moisture content

PM-10

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0057 lb/ton
where k = 0.35 (particle size multiplier)
U = 8.3 mile/hr mean wind speed
M = 1 % material moisture content

*** * storage * ***

Storage emissions, which result from wind erosion, are determined by the following calculations:

PM/PM10

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
= 3.55 lb/acre/day
where s = 4.6 % silt content of material
p = 125 days of rain greater than or equal to 0.01 inches
f = 10 % of wind greater than or equal to 12 mph
Ep (storage) = Ef*sc*(40 cuft/ton)/(2000 lb/ton)/(43560 sqft/acre)/(25 ft)*(365 day/yr)
= 0.024 tons/yr
where sc = 1 ,000 tons storage capacity

Appendix A: Emission Calculations
Synthetic Gypsum Blending
Limited Potential to Emit

Company Name: Lehigh Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Source Modification Number: 093-19158
Permit Modification Number: 093-18649
Plant ID: 093-00002
Reviewer: CarrieAnn Paukowits
Date: May 11, 2004

PM

Storage			** see below **			0.02	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Aggregate Dropping (to synthetic gypsum storage pile)	35,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.21	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum hopper)	35,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.21	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum weigh belt)	35,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.21	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material storage pile)	15,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.09	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material hopper)	15,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.09	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material weigh belt)	15,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.09	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #1)	50,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.30	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #1; transfer point enclosed)	enclosed	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to CKD silo)	35,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.21	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #2; transfer point enclosed)	enclosed	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (synthetic gypsum and raw material to pugmill)	85,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.51	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to pugmill)	enclosed	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #2)	85,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.51	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage)	85,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.51	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage building)	85,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.51	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (pile movement by cranes)	85,000.0	tons/yr x	0.0121	lb/ton	/ 2000 lb/ton =	0.51	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Total emissions before controls:						4.01	tons/yr	

PM-10

Storage			** see below **			0.02	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Aggregate Dropping (to synthetic gypsum storage pile)	35,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.10	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum hopper)	35,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.10	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to synthetic gypsum weigh belt)	35,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.10	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material storage pile)	15,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.04	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material hopper)	15,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.04	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to raw material weigh belt)	15,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.04	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #1)	50,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.14	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #1; transfer point enclosed)	enclosed	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to CKD silo)	35,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.10	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to conveyor #2; transfer point enclosed)	enclosed	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (synthetic gypsum and raw material to pugmill)	85,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.24	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (CKD to pugmill)	enclosed	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.00	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to main belt #2)	85,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.24	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage)	85,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.24	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (to storage building)	85,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.24	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Aggregate Dropping (pile movement by cranes)	85,000.0	tons/yr x	0.0057	lb/ton	/ 2000 lb/ton =	0.24	tons/yr	AP-42 Ch. 13.2.4 (Fifth edition, 1/95)
Total emissions before controls:						1.91	tons/yr	

*** * aggregate handling emission factor * ***

The following calculations determine the amount of emissions created by dropping of material, based on 8760 hours of use and AP-42 13.2.4 (Fifth edition, 1/95).

PM

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0121 lb/ton
where k = 0.74 (particle size multiplier)
U = 8.3 mile/hr mean wind speed
M = 1 % material moisture content

PM-10

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0057 lb/ton
where k = 0.35 (particle size multiplier)
U = 8.3 mile/hr mean wind speed
M = 1 % material moisture content

*** * storage * ***

Storage emissions, which result from wind erosion, are determined by the following calculations:

PM/PM10

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
= 3.55 lb/acre/day
where s = 4.6 % silt content of material
p = 125 days of rain greater than or equal to 0.01 inches
f = 10 % of wind greater than or equal to 12 mph
Ep (storage) = Ef*sc*(40 cuft/ton)/(2000 lb/ton)/(43560 sqft/acre)/(25 ft)*(365 day/yr)
= 0.024 tons/yr
where sc = 1 ,000 tons storage capacity