



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: June 28, 2012

RE: Essroc Cement Corporation / 019-26989-00008

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

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Essroc Cement Corporation
301 Highway 31
Speed, Indiana 46712**

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

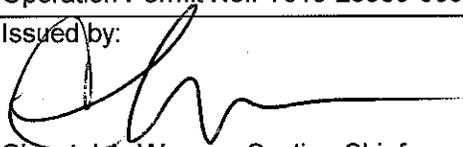
Operation Permit No.: T019-26989-00008	
Issued by:  Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 28, 2012 Expiration Date: June 28, 2017

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

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.3 through A.4 and the description boxes in Sections D is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

Source Address:	301 Highway 31, Speed, Indiana 47172
General Source Phone Number:	(812) 246-5472
SIC Code:	3241
County Location:	Clark
Source Location Status:	Nonattainment for PM _{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 listed source categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This Portland cement manufacturing company consists of one (1) plant:

Essroc Cement Corporation, #00008, located at 301 Highway 31, Speed, IN 47172.

IDEM has determined that Hanson Aggregates Midwest Inc. - Aggrock Quarries, #05017, located at 5501 Highway 403, Sellersburg, IN 47172 is not under common control of Essroc Cement Corporation; therefore, they are considered separate sources for the purposes of Part 70 applicability.

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

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

Quarry Activities

- (1) Quarry drilling, identified as EU01, constructed in 1982, with particulate matter (PM) emissions controlled by one (1) baghouse, identified as the drilling rig baghouse 01 and exhausting to stack EP01. Note: The baghouse controlling the quarry drilling has no exhaust to the atmosphere. Dust is collected and then re-deposited into the ground.
- (2) Quarry blasting, identified as EU75, constructed prior to 1945, with associated fugitive particulate matter (PM) emissions.
- (3) Raw material (limestone) loading to trucks, identified as EU76, constructed in 1948, with particulate matter emissions uncontrolled.

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78, constructed in 1948, with emissions uncontrolled.
- (5) Strippings stockpile, identified as EU145, created before 1945.

- (6) Truck unloading to additive hopper or additive storage piles (various sources of Silica/Alumina/Iron), identified as EU99, constructed in 1948, with emissions uncontrolled.
- (7) Various sources of Silica/Alumina/Iron additive storage piles, identified as EU100, created before 1945.
- (8) Additive clay blend pile, identified as EU101, created before 1945.
- (9) Truck unloading to clay storage piles, identified as EU102, constructed in 1948, with emissions uncontrolled.
- (10) Uncovered clay storage pile, identified as EU103, created before 1945.
- (11) Covered clay and ash storage piles, identified as EU104, created before 1945.

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80, with emissions uncontrolled, commenced before 1956.
- (13) Stone surge pile, identified as EU81, created before 1956.
- (14) One (1) primary crusher, identified as EU82, constructed in 1956, with a nominal throughput of 700 tons per hour, with PM emissions uncontrolled.
- (15) One (1) covered conveyor belt for transferring stone from primary crusher to screens, identified as EU83, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
- (16) Screens, identified as EU84, with a nominal throughput of 700 tons per hour, constructed in 1956, with emissions uncontrolled.
- (17) One (1) secondary crusher, identified as EU02, constructed in 1956, with a nominal throughput of 1050 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 200, and exhausting to one (1) stack, identified as EP02.
- (18) Covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass, identified as EU03, constructed in 1956, with a nominal throughput of 1050 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (19) One (1) tertiary crusher, identified as EU04, constructed in 1956, with a nominal throughput of 350 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (20) One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05, constructed in 1956, with emissions controlled by a baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (21) One (1) covered conveyor for transferring material from stone ladder and tertiary crusher to traveling belt, identified as EU85, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
- (22) One (1) traveling belt for transferring material from covered conveyor to North and South stone bins, identified as EU86, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.

- (23) North stone bin, identified as EU06, constructed in 1956, with emissions controlled by a baghouse, identified as baghouse 101, and exhausting to one (1) stack, identified as EP04.
- (24) South stone bin, identified as EU07, constructed in 1956, with emissions controlled by one (1) baghouse, identified as baghouse 102, and exhausting to one (1) stack, identified as EP05.
- (25) Stone conveyor transfer to truck, identified as EU87, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
- (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89, constructed in 1956, with emissions uncontrolled.
- (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91, constructed in 1956, with emissions uncontrolled.
- (28) One (1) truck unloading station to truck dump hopper, identified as EU93, constructed in 1956, with emissions uncontrolled.
- (29) One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94, constructed in 1956, with emissions uncontrolled.
- (30) Crushed limestone storage piles, identified as EU90, created before 1957.
- (31) Emergency limestone storage pile, identified as EU95, created during 1957.
- (32) One (1) truck dump hopper, identified as EU96, constructed in 1977, with emission uncontrolled.
- (33) One (1) limestone conveyor for transferring limestone from the truck dump hopper to the main limestone storage pile, identified as EU97, constructed in 1977, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
- (34) Main limestone storage pile, identified as EU98, created during 1957.

Kiln #1 Cement Kiln Dust (CKD) Operations

- (35) One (1) dust tank system, identified as EU21, constructed in 1971 with a nominal throughput of 100 tons per hour, with emissions controlled by a baghouse, identified as baghouse 210, and exhausting to stack EP17.
- (36) Truck loading from baghouse 221, identified as EU113, with emissions uncontrolled, commenced during July 1971.
- (37) CKD storage pile, identified as EU118, created before 1945.
- (38) CKD sales loadout spout (kiln #1 dust tank), identified as EU155, constructed in 1996, with emissions controlled by a baghouse, with a nominal air flow rate of 2400 actual cubic feet per minute, identified as baghouse 266 (CE98) and exhausting to stack EP98.

Kiln #2 Cement Kiln Dust (CKD) Operations

- (39) Truck loading from the elevator dust tank, identified as EU115, with emissions uncontrolled, commenced during 1977.
- (40) Truck loading from baghouse 16 (alkali bypass system), identified as EU117, with emissions uncontrolled, commenced during 1977.

- (41) One (1) elevator/dust tank (associated with the alkali bypass) for kiln #2, identified as EU28, constructed in 1977, with emissions controlled by baghouse 232 and exhausting to stack EP23.

Miscellaneous Facilities

- (42) Plant Roads, identified as EU152.
- (43) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74, constructed in 1985, with emissions controlled by a baghouse with a nominal air flow rate of 1650 actual cubic feet per minute, identified as baghouse 249, and exhausting to stack EP76.

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945.
- (45) One (1) covered conveyor system for transferring material from the clay hopper to the clay crusher, identified as EU106, constructed before 1954, with a nominal throughput of 75 tons per hour, with emissions uncontrolled.
- (46) One (1) clay crusher, identified as EU08, constructed in 1977, with a nominal throughput of 75 tons per hour, with emissions controlled by a baghouse, identified as baghouse 227, and exhausting to stack EP07.

Finish Operations Crane Storage Facilities

- (47) Emergency BP stone storage pile, identified as EU128, created before 1945.
- (48) One (1) truck unloading station to Emergency BP stone storage pile or Crane storage pile, identified as EU127, with emissions uncontrolled, commenced before 1945.
- (49) One (1) truck unloading station to gypsum storage piles, identified as EU129, with emissions uncontrolled, commenced before 1945.
- (50) Crane storage building, including gypsum storage bin, stone storage bin, two (2) clinker storage bins, and stone, clinker, and gypsum storage piles, identified as EU131, constructed in 1935.
- (51) Gypsum storage piles, identified as EU130 and EU134, created before 1945.

Fossil Fuel Storage and Handling Facilities

- (52) Coal trucks unloading to the coal storage piles and reserve coal storage piles, identified as EU136, constructed in June 1971, with emissions uncontrolled.
- (53) Reserve coal storage piles, identified as EU137, created in May 1971.
- (54) Coal storage piles, identified as EU142, constructed prior to 1945.
- (55) One (1) coal draw-up covered conveying system for transferring material from the coal/alternate energy storage pile to the coal transfer tower, identified as EU63, constructed in June 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 206, and exhausting to stack EP77.
- (56) Coal transfer tower, identified as EU64, constructed in June 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 207, and exhausting to stack EP78.

- (57) One (1) coal bin, identified as EU65, constructed in June 1972, with emissions controlled by one (1) baghouse, identified as baghouse 208, and exhausting to stack EP79.

Kiln #1 Clinker Handling Facilities

- (58) One (1) #1 clinker drag conveyor for transferring clinker from clinker cooler #1 to the apron conveyor, identified as EU23, constructed in May 1971, with a nominal throughput of 100 tons per hour, with emissions controlled by a baghouse, identified as baghouse 217, and exhausting to one (1) stack identified as EP19.
- (59) Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24, constructed in May 1971, with a nominal throughput of 100 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 218, exhausting to one (1) stack identified as EP21.
- (60) Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 31382, exhausting to one (1) stack identified as EPN1.

Kiln #2 Clinker Handling Facilities

- (61) One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157, constructed in 2009, with emissions uncontrolled.
- (62) One (1) #2 clinker drag conveyor for transferring clinker from clinker cooler #2 to the aumond conveyor, identified as EU30, constructed in 1977, with a nominal throughput of 150 tons per hour, with emissions controlled by a baghouse, identified as baghouse 233, and exhausting to one (1) stack identified as EP25.
- (63) One (1) aumond conveyor used for transferring clinker and clinker dust from the #2 clinker drag conveyor, #2 cooler, and baghouse 17 to the clinker can #2 or the cross belt, identified as EU31, constructed in 1977, with a nominal throughput of 150 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 234, exhausting to one (1) stack identified as EP26.
- (64) One (1) cross belt for transferring clinker to the long belt, identified as EU119, constructed in May 1971, with a nominal throughput of 150 tons per hour, with emissions controlled by a baghouse, identified as baghouse 218, and exhausting to one (1) stack identified as EP21.
- (65) Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120, constructed in 1977, with emissions controlled by one (1) baghouse, identified as baghouse 31382, exhausting to one (1) stack identified as EPN1.

Clinker Handling to Crane Storage Facilities

- (66) One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25, constructed in May 1971, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouse 35925, exhausting to one (1) stack identified as EP27, and baghouse 218, exhausting to one (1) stack identified as EP21.
- (67) One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt, identified as EU32, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35925, and exhausting to one (1) stack identified as EP27.

- (68) One (1) covered incline belt used for transferring clinker from the North clinker transfer tower to the Shuttle Belt then to the North clinker storage building, identified as EU33, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35931, and exhausting to one (1) stack identified as EPN7.
- (69) One (1) clinker storage pile, identified as EU121, created before 1960.
- (70) North clinker storage pile, identified as EU122, created in May 1971.
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7.
- (72) One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44), identified as EU34, constructed in 1962, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35927, and exhausting to one (1) stack identified as EP29.
- (73) One (1) South reclaim clinker covered conveyor used to transfer clinker from the North reclaim clinker covered conveyor system to the crane storage building, identified as EU124, constructed in May 1971, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouse 202, exhausting to one (1) stack identified as EP39 and baghouse 31499, exhausting to one (1) stack identified as EPN2.
- (74) Truck loading station, used for loading material from the North clinker storage pile and clinker storage pile, identified as EU125, constructed in May 1971, with emissions uncontrolled.
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126, constructed in May 1971, with emissions uncontrolled.

2ABC Finish Mill Facilities

- (76) One (1) Base tank (CKD), identified as EU146, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 143, and exhausting to one (1) stack identified as EP84.
- (77) One (1) gypsum/stone/clinker transfer circuit ABC mills, including material transfers and scales, identified as EU35, constructed in 1964, with a nominal throughput of 200 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 131, 31495, and 31496, and exhausting to three (3) stacks identified as EP30, EPN3, and EPN4, respectively.
- (78) Two (2) clinker elevators, identified as EU37, constructed in 1969, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 133, and exhausting to one (1) stack identified as EP33.
- (79) One (1) 2BC finish mill feed belt, identified as EU132, constructed in 1977, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 135 and 137, exhausting to two (2) stacks identified as EP35 and EP37, respectively.
- (80) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38, constructed in 1948, with a nominal throughput of 24 tons per hour, with emissions controlled by a baghouse, identified as baghouse 133, and exhausting to one (1) stack identified as EP33.

- (81) One (1) finish mill circuit 2A, which includes three (3) elevators, finish mill, separator, and air transport system, collectively identified as EU39, constructed in 1948, with a nominal throughput of 24 tons per hour, with emissions controlled by a baghouse, identified as baghouse 134, and exhausting to one (1) stack identified as EP34.
- (82) One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU40, constructed in 1953, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse 135, and exhausting to one (1) stack identified as EP35.
- (83) One (1) finish mill circuit 2C, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU42, constructed in 1960, with a nominal throughput of 36 tons per hour, with emissions controlled by a baghouse, identified as baghouse 137, and exhausting to one (1) stack identified as EP37.
- (84) One (1) separator circuit, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2C, identified as EU43, constructed in 1960 and 1964, respectively, with a nominal throughput of 36 tons per hour, with emissions controlled by a baghouse, identified as baghouse 138, and exhausting to one (1) stack identified as EP37.
- (85) One (1) separator, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2B, identified as EU41, constructed in 1953 and 1955, respectively, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse 136, and exhausting to one (1) stack identified as EP35.
- (86) One (1) BP tank for storing finished product (cement), identified as EU48, constructed in 1965, with a nominal throughput of 700 tons per hour, with emissions controlled by a baghouse, identified as baghouse 144, and exhausting to one (1) stack identified as EP81.
- (87) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49, constructed in 1966, with a nominal throughput of 50 tons per hour, with emissions controlled by a baghouse, identified as baghouse 146, and exhausting to one (1) stack identified as EP82.

2D Finish Mill Facilities

- (88) One (1) gypsum elevator used to transfer material from the gypsum storage piles to the 2D finish mill circuit, identified as EU135, constructed in 1964, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 120, and exhausting to one (1) stack identified as EP40.
- (89) One (1) 2D finish mill clinker bin transfer, which includes the elevator, conveyor belts, and air transport system, identified as EU44, constructed in 1964, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 120, and exhausting to stack identified as EP40.
- (90) One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouse 36643, exhausting to one (1) stack identified as EPN11, baghouse 31497 exhausting to one (1) stack identified as EPN5, and baghouse 31498 exhausting to one (1) stack identified as EPN6.

- (91) One (1) 2D finish mill roll press circuit, which includes a roller press (crusher) with surge bin, identified as EU46, constructed in 1999, with a nominal throughput of 140 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 261, DC35990, and DC35997, and exhausting to three (3) stacks identified as EP93, EPN8, and EPN9, respectively.
- (92) One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and a cement cooler, identified as EU47, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 139 and 36643, exhausting to two (2) stacks identified as EP41 and EPN11, respectively.

Finish Product 501-Silos Storage and Packing Facilities

- (93) 501-Silos 25-44, identified as EU54, constructed in 1965, with emissions controlled by five (5) baghouses, identified as baghouses 224, 225, 246, 150, and 151, and exhausting to five (5) stacks identified as EP63 through EP67, respectively.
- (94) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 224 and 225, and exhausting to two (2) stacks identified as EP102 and EP68.
- (95) One (1) BIC packer for loading cement into bags, identified as EU56, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 224 and 225, and exhausting to two (2) stacks identified as EP102 and EP68.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- (96) 506-Silos 56-73, identified as EU53, constructed in 1958, with emissions controlled by fourteen (14) baghouses, identified as baghouses 159 through 172, and exhausting to fourteen (14) stacks identified as EP49 through EP62, respectively.
- (97) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58, constructed in 1954, each with a nominal throughput of 200 tons per hour, with emissions controlled by baghouses 176 and 177, respectively, and exhausting to stacks EP69 and EP70 respectively.
- (98) One (1) north packer #1 for loading cement into bags, identified as EU59, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 173, and exhausting to one (1) stack identified as EP71.
- (99) One (1) center packer #2 for loading cement into bags, identified as EU60, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 174, and exhausting to one (1) stack identified as EP72.
- (100) One (1) south packer #3 for loading cement into bags, identified as EU61, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 175, and exhausting to one (1) stack identified as EP73.
- (101) One (1) bag compression station, identified as EU62, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 242, and exhausting to one (1) stack identified as EP74.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- (102) 504-Silos 45-48, and 50-55, identified as EU51, constructed in 1959, with emissions controlled by four (4) baghouses, identified as baghouses 153 through 156, and exhausting to four (4) stacks identified as EP44 through EP47, respectively.
- (103) One (1) bulk loading station for trucks and railroad cars, identified as EU52, constructed in 1959, with a nominal throughput of 200 tons per hour, with emissions controlled by baghouse 152, and exhausting to stack EP48.
- (104) 504 Silos Bank/Silo 49 (CKD sales), identified as EU153, constructed in 1959, with emissions controlled by a baghouse, identified as baghouse 264 and exhausting to stack EP96.
- (105) CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154, constructed in 1999, with emissions controlled by a baghouse, identified as baghouse 265 and exhausting to stack EP97.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- (106) 502-Silos 1, 2, and 7-11, identified as EU50, constructed in 1966, with emissions controlled by two (2) baghouses, identified as baghouses 148 and 149, and exhausting to two (2) stacks, identified as EP42 and EP43, respectively.

Raw Mill Facilities

- (107) Two (2) pneumatic truck unloading stations, identified as EU107 and EU108, constructed in July 1976, to fly ash tanks (EU10 and EU11), with emissions controlled by two (2) baghouses, identified as baghouse 228 and baghouse 35363, and exhausting to stacks EP09 and EPN12, respectively.
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled.
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled.
- (110) Two (2) silos for flyash, identified as EU10 and EU11, with emissions controlled by two (2) baghouses, identified as baghouse 228 exhausting to stack EP09, and baghouse 35363 exhausting to stack EPN12.
- (111) One (1) silo for iron ore, identified as EU12, equipped with one (1) elevator, constructed in 1977, with emissions controlled by one (1) baghouse, baghouse 35363 (west flyash tank baghouse) and exhausting to stack EPN12.
- (112) One (1) C-15 covered conveyor system for transferring material from the clay breaker, bottom ash hopper, iron ore tank, fly ash tanks, raw material pile, and the main limestone storage pile to the Loesche raw mill, identified as EU09, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 227 (clay crusher), 35134 (C-15 east flyash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively.
- (113) One (1) Loesche raw mill, identified as EU14, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 15, and exhausting to stack S-15.

- (114) One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed to the feed and blend silos, identified as EU15, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 247 and exhausting to stack EP-11.
- (115) One (1) raw material pile, identified as EU112.
- (116) One (1) oil-fired furnace, referred to as the Todd Furnace, used for Loesche mill heating, identified as EU13, constructed in 1977, with a nominal heat input capacity of 55 million British thermal units per hour, with emissions controlled by one (1) baghouse, identified as baghouse 15, and exhausting to stack S-15.
- (117) Feed silo #1 for kiln feed, identified as EU16, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 211, and exhausting to stack EP12.
- (118) Blend silo #2 for blending kiln feed, identified as EU17, constructed in 1977, with emissions controlled by one (1) baghouse, identified as baghouse 230, and exhausting to stack EP13.
- (119) One (1) calibration system, identified as EU18, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 212, and exhausting to stack EP14.

Coal Handling, Milling and Storage Facilities

- (120) Coal (crusher) mill #1, identified as EU66 servicing kiln #1, constructed in May 1971, with a nominal throughput of 12.5 tons per hour, with emissions routed to kiln #1 and controlled by baghouse 221 and exhausting to one (1) stack, identified as S-14.
- (121) Coal (crusher) mill #2, identified as EU67 servicing kiln #2, constructed in 1977, with a nominal throughput of 14 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 252, and exhausting to stack EP88. Note: For the purposes of NSPS Subpart Y applicability, this is also a thermal dryer.
- (122) One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68, constructed in May 1971, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #1 coal mill then routed to kiln #1 and controlled by one (1) baghouse, identified as baghouse 221 and exhausting to stack S-14.
- (123) One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69, constructed in 1977, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #2 coal mill controlled by one (1) baghouse identified as baghouse 252, exhausting to stack EP88. Note: For the purposes of NSPS Subpart Y applicability, this is also a thermal dryer.
- (124) Kiln #2 pulverized coal silo, identified as EU149, constructed in 1996, with emissions controlled by one (1) baghouse with a nominal air flow rate of 200 actual cubic feet per minute, identified as baghouse 253 and exhausting to one (1) stack identified as EP101.
- (125) Kiln #2 coal weigh system, identified as EU150, constructed in 1996, with a nominal throughput of 20 tons per hour, with emissions controlled by one filter, identified as filter 254 and exhausting to a vent.
- (126) Kiln #2 burner pump system, identified as EU151, constructed in 1996, with a nominal throughput of 20 tons per hour, with emissions controlled by one filter, identified as filter 255 and exhausting to a vent.

The Kiln #1 and Kiln #2 Facilities

- (127) One (1) feed system for kiln #1, identified as EU19, constructed in May 1971, with a nominal throughput of 105 tons per hour, with PM emissions from the alleviator controlled by one (1) baghouse, identified as baghouse 209 and exhausting to stack EP15 and with PM emissions from the scales and pump controlled by one (1) baghouse, identified as baghouse 212 and exhausting to stack EP14.
- (128) One (1) long dry process rotary cement kiln #1, identified as EU20, constructed in May 1971, with a nominal heat input capacity of 184 million Btu per hour, with a nominal production rate of 60 tons per hour (as clinker), with PM emissions controlled by one (1) baghouse, identified as baghouse 221, and exhausting to one (1) stack, identified as S-14.
- (129) One (1) feed system for kiln #2, identified as EU26, constructed in 1977, with a nominal throughput of 175 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 231, and exhausting to stack EP80.
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27, constructed in 1977, with a nominal heat input capacity of 302 million Btu per hour, with a nominal production rate of 105 tons per hour (as clinker), with PM emissions controlled by two (2) baghouses, identified as baghouse 15 and baghouse 16 (alkali bypass system), and exhausting to stacks S-15 and S-16, respectively.

The Clinker Cooler #1 Facilities

- (131) One (1) grate clinker cooler #1, identified as EU22, constructed in May 1971, with a nominal throughput rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 222, and exhausting to one (1) stack, identified as S-13.

The Clinker Cooler #2 Facilities

- (132) One (1) grate clinker cooler #2, identified as EU29, constructed in 1977, with a nominal throughput of 105 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 17, and exhausting to one (1) stack, identified as S-17.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

- (1) Degreasing operations. [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8]
- (2) Underground conveyors. [326 IAC 6.5-1-2]
- (3) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.5-1-2]

Finish Product 501-Silos Storage and Packing Facilities

- (4) One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156, installed in 2012, with emissions controlled by one (1) baghouse, identified as baghouse 225, and exhausting to one (1) stack, identified as EP64. [326 IAC 6.5-1-2] [40 CFR 63, Subpart LLL]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T019-26989-00008, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

- (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

The Permittee shall implement the PMPs.

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

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

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained no later than the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: (317) 233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch);
Facsimile Number: (317) 233-6865
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

- (b) The IDEM, OAQ has made the following determinations regarding this source:
 - (1) None of the quarry activities, raw material stockpile operations, or raw material sizing operations listed in Section D.1 are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities under this rule.
 - (2) None of the cement kiln dust operations listed in Section D.1 are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants), because they are not considered affected facilities under this rule.
 - (3) None of the quarry activities, raw material stockpile operations, or raw material sizing facilities/emission units listed in Section D.1 are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not affected facilities under this rule.
 - (4) None of the cement kiln dust operations listed in Section D.1 are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not considered affected facilities under this rule.
 - (5) None of the facilities/emission units listed in Section D.1 are subject to the requirements of the NSPS, 40 CFR 60, Subpart OOO (Standards of Performance

for Nonmetallic Mineral Processing Plants) because they were constructed prior to the applicability date of August 31, 1983.

- (6) The warehouse conveyor system (EU74); the kiln #2 clinker handling facilities (EU157, EU30, EU31, and EU120); the clinker handling to crane storage facilities (EU32 and EU33), finish mill feed belt (EU132); the 2D finish mill roll press circuit (EU46); the BIC mixer and packer (EU55 and EU56); the raw mill facilities (EU09 through EU15, EU17, EU107 through EU109, and EU158); the kiln #2 (EU27) and kiln #2 feed system (EU26); and the clinker cooler #2 (EU29) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are subject to more the stringent requirements of the NESHAP 40 CFR 63 Subpart LLL. None of the other facilities listed in Section D.2 are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities under this rule, or they were constructed prior to the applicability date of August 17, 1971.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T019-26989-00008 and issued pursuant to permitting programs approved into the state implementation plan have been either:

- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]**

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

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Preconstruction approval is not required by 326 IAC 2-7-10.5;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b) or (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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

The application which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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

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

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

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

C.5 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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4. 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.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

C.7 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

- (a) Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required

intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.12 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:
 - (1) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
 - (2) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (A) initial inspection and evaluation;
 - (B) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (C) any necessary follow-up actions to return operation to normal or usual manner of operation.

- (3) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (A) monitoring results;
 - (B) review of operation and maintenance procedures and records; and/or
 - (C) inspection of the control device, associated capture system, and the process.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (5) The Permittee shall record of the reasonable responses steps taken.
- (b)
- (1) *CAM Response to Excursions or Exceedances.*
 - (A) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - (B) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
 - (2) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
 - (3) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

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

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-51 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
- (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the Part 70 permit.
- Records of required monitoring information include the following:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
 - (BB) The dates analyses were performed.
 - (CC) The company or entity that performed the analyses.
 - (DD) The analytical techniques or methods used.
 - (EE) The results of such analyses.
 - (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8(b)(6)(A), 326 IAC 2-2-8(b)(6)(B), 326 IAC 2-3-2(l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part

of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1(kk)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8(b)(6)(A) and/or 326 IAC 2-3-2(l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
[40 CFR 64][326 IAC 3-8]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

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

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

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

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

- (b) The address for report submittal is:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(ww) and/or 326 IAC 2-3-1(pp), for that regulated NSR pollutant, and

- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 FACILITY OPERATION CONDITIONS - Quarry Activities, Stockpile Operations, Raw Material Sizing, and CKD Operations

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

Quarry Activities

- (1) Quarry drilling, identified as EU01.
- (2) Quarry blasting, identified as EU75.
- (3) Raw material (limestone) loading to trucks, identified as EU76.

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78.
- (5) Strippings stockpile, identified as EU145.
- (6) Truck unloading to additive hopper or additive storage piles (various sources of Silica/Alumina/Iron), identified as EU99.
- (7) Various sources of Silica/Alumina/Iron additive storage piles, identified as EU100.
- (8) Additive clay blend pile, identified as EU101.
- (9) Truck unloading to clay storage piles, identified as EU102.
- (10) Uncovered clay storage pile, identified as EU103.
- (11) Covered clay and ash storage piles, identified as EU104.

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80.
- (13) Stone surge pile, identified as EU81.
- (14) One (1) primary crusher, identified as EU82.
- (15) One (1) covered conveyor belt, identified as EU83.
- (16) Screens, identified as EU84.
- (17) One (1) secondary crusher, identified as EU02.
- (18) Covered conveyor, identified as EU03.
- (19) One (1) tertiary crusher, identified as EU04.
- (20) One (1) conveyor used to bypass tertiary crusher, identified as EU05.
- (21) One (1) covered conveyor, identified as EU85.
- (22) One (1) traveling belt, identified as EU86.
- (23) North stone bin, identified as EU06.
- (24) South stone bin, identified as EU07.
- (25) Stone conveyor transfer to truck, identified as EU87.
- (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89.
- (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91.
- (28) One (1) truck unloading station to truck dump hopper, identified as EU93.
- (29) One (1) truck unloading station to emergency limestone storage pile, identified as EU94.
- (30) Crushed limestone storage piles, identified as EU90.
- (31) Emergency limestone storage pile, identified as EU95.
- (32) One (1) truck dump hopper, identified as EU96.
- (33) One (1) limestone conveyor, identified as EU97.
- (34) Main limestone storage pile, identified as EU98.

(continued on next page)

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Kiln #1 Cement Kiln Dust (CKD) Operations

- (35) One (1) dust tank system, identified as EU21.
- (36) Truck loading from baghouse 221, identified as EU113.
- (37) CKD storage pile, identified as EU118.
- (38) CKD sales loadout spout (kiln #1 dust tank), identified as EU155.

Kiln #2 Cement Kiln Dust (CKD) Operations

- (39) Truck loading from the elevator dust tank, identified as EU115.
- (40) Truck loading from baghouse 16 (alkali bypass system), identified as EU117.
- (41) One (1) elevator/dust tank (associated with the alkali bypass) for kiln #2, identified as EU28.

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

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

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limit for PM/PM₁₀ [326 IAC 2-2]

- (a) Pursuant to Part 70 Permit T019-6016-00008 (issued June 15, 2004), in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM₁₀ emissions from the baghouse controlling the CKD sales loadout spout (kiln #1 dust tank) (EU155) shall not exceed 0.65 pounds per hour and the PM emissions shall not exceed 1.08 pounds per hour. Therefore, the requirements of 326 IAC 2-2 (PSD) shall not apply.
- (b) Pursuant to Part 70 Permit T019-6016-00008 (issued June 15, 2004), in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the number of holes drilled by the quarry drilling process shall not exceed 38,000 per twelve (12) consecutive month period and the PM emissions shall not exceed 1.3 pounds per hole. Therefore, the requirements of 326 IAC 2-2 (PSD) shall not apply.

D.1.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, particulate emissions from each of the following facilities shall not exceed 0.03 grains per dry standard cubic foot (dscf) of exhaust air.

- (a) Quarry drilling, identified as EU01.
- (b) Covered conveyor, identified as EU03.
- (c) One (1) conveyor used to bypass tertiary crusher, identified as EU05.
- (d) One (1) dust tank system, identified as EU21.
- (e) Truck loading from baghouse 221, identified as EU113.
- (f) CKD sales loadout spout (kiln #1 dust tank), identified as EU155.
- (g) Truck loading from the elevator dust tank, identified as EU115.

D.1.3 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following operations shall each not exceed the pound per hour limit E when operating at the maximum process weight rate P.

- (a) One (1) secondary crusher, identified as EU02.
- (b) One (1) tertiary crusher, identified as EU04.
- (c) North stone bin, identified as EU06.
- (d) South stone bin, identified as EU07.
- (e) One (1) elevator/dust tank (associated with the alkali bypass), identified as EU28.

The pounds per hour limitations (e) shall be calculated with the following equations:

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

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

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

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

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

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

Compliance Determination Requirements

D.1.5 Particulate Matter (PM) Control

(a) In order to comply with Conditions D.1.1 - Prevention of Significant Deterioration (PSD) Minor Limit for PM/PM₁₀, D.1.2 - Particulate Matter (PM), and D.1.3 - Particulate Emissions, each baghouse for particulate control shall be in operation and control emissions at all times an associated facility, as listed in the table below, is in operation.

Unit ID (Unit Description)	Baghouse ID
EU01 - quarry drilling	drilling rig baghouse 01
EU02 - secondary crusher	200
EU03 - covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass	201
EU04 - tertiary crusher	201
EU05 - stone ladder	201
EU06 - north stone bin	101
EU07 - south stone bin	102
EU21 - dust tank system	210
EU155 - CKD sales loadout spout	266
EU28 - elevator/dust tank for kiln #2	232

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

Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to demonstrate compliance with Conditions D.1.1 - Prevention of Significant Deterioration (PSD) and Condition D.1.2 - Particulate Matter (PM), the Permittee shall perform PM and PM₁₀ testing on baghouse 266 controlling the CKD sales loadout spout (kiln #1 dust tank) (EU155). Testing shall be conducted utilizing methods approved by the Commissioner and shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

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

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least 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 visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: secondary crusher (EU02), covered conveyor (EU03), tertiary crusher (EU04), conveyor used to bypass tertiary crusher (EU05), north stone bin (EU06), and south stone bin (EU07), dust tank system (EU21), CKD sales loadout spout (kiln #1 dust tank) (EU155), and elevator/dust tank (associated with the alkali bypass) for kiln #2 (EU28).

D.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse, used in conjunction with the facilities listed in this section, at least once per day when the associated facility is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 to 8.0 inches of water or the range established during the most recent stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: secondary crusher (EU02), covered conveyor (EU03), tertiary crusher (EU04), conveyor used to bypass tertiary crusher (EU05), north stone bin (EU06), and south stone bin (EU07), dust tank system (EU21), CKD sales loadout spout (kiln #1 dust tank) (EU155), and elevator/dust tank (associated with the alkali bypass) for kiln #2 (EU28).

D.1.9 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or

replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.7 - Visible Emissions Notations, the Permittee shall maintain records of visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.8 - Parametric Monitoring, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.1.1(b) - Prevention of Significant Deterioration (PSD) Minor Limit for PM, the Permittee shall maintain records of the number of holes drilled at the quarry.
- (d) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with the limit specified in Condition D.1.1(b) - Prevention of Significant Deterioration (PSD) Minor Limit PM shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. This report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS - Miscellaneous Facilities, Clay Processing Operations, Finish Operations Crane Storage Facilities, Fossil Fuel Storage and Handling Facilities, Clinker Handling Facilities, Clinker Handling to Crane Storage Facilities, Finish Mill Facilities, and Silos

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

Miscellaneous Facilities

- (42) Plant Roads, identified as EU152.
- (43) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74.

Clay Processing Operations

- (44) Clay hopper, identified as EU105.
- (45) One (1) covered conveyor system, identified as EU106.
- (46) One (1) clay crusher, identified as EU08.

Finish Operations Crane Storage Facilities

- (47) Emergency BP stone storage pile, identified as EU128.
- (48) One (1) truck unloading station, identified as EU127.
- (49) One (1) truck unloading station to gypsum storage piles, identified as EU129.
- (50) Crane storage building, identified as EU131.
- (51) Gypsum storage piles, identified as EU130 and EU134.

Fossil Fuel Storage and Handling Facilities

- (52) Coal trucks unloading to the coal storage piles and reserve coal storage piles, identified as EU136.
- (53) Reserve coal storage piles, identified as EU137.
- (54) Coal storage piles, identified as EU142.
- (55) One (1) coal draw-up covered conveying system, identified as EU63.
- (56) Coal transfer tower, identified as EU64.
- (57) One (1) coal bin, identified as EU65.

Kiln #1 Clinker Handling Facilities

- (58) One (1) #1 clinker drag conveyor, identified as EU23.
- (59) Apron conveyor, identified as EU24.
- (60) Clinker can #1, identified as EU114.

Kiln #2 Clinker Handling Facilities

- (61) One (1) Kreyling hopper, identified as EU157.
- (62) One (1) #2 clinker drag conveyor, identified as EU30.
- (63) One (1) aumond conveyor, identified as EU31.
- (64) One (1) cross belt, identified as EU119.
- (65) Clinker can #2, identified as EU120.

Clinker Handling to Crane Storage Facilities

- (66) One (1) long belt, identified as EU25.
- (67) One (1) North clinker transfer tower, identified as EU32.
- (68) One (1) covered incline belt, identified as EU33.
- (69) One (1) clinker storage pile, identified as EU121.
- (70) North clinker storage pile, identified as EU122.
- (71) North clinker storage building, identified as EU123.

(continued on next page)

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Clinker Handling to Crane Storage Facilities (continued)

- (72) One (1) North reclaim clinker covered conveyor system, identified as EU34.
- (73) One (1) South reclaim clinker covered conveyor, identified as EU124.
- (74) Truck loading station, identified as EU125.
- (75) Truck unloading station, identified as EU126.

2ABC Finish Mill Facilities

- (76) One (1) Base tank (CKD), identified as EU146.
- (77) One (1) gypsum/stone/clinker transfer circuit ABC mills, identified as EU35.
- (78) Two (2) clinker elevators, identified as EU37.
- (79) One (1) 2BC finish mill feed belt, identified as EU132.
- (80) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- (81) One (1) finish mill circuit 2A, identified as EU39.
- (82) One (1) finish mill circuit 2B, identified as EU40.
- (83) One (1) finish mill circuit 2C, identified as EU42.
- (84) One (1) separator circuit, which includes an air transport system and pump, identified as EU43.
- (85) One (1) separator, which includes an air transport system and pump, identified as EU41.
- (86) One (1) BP tank for storing finished product (cement), identified as EU48.
- (87) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.

Finish Mill 2 Facilities

- (88) One (1) gypsum elevator, identified as EU135.
- (89) One (1) 2D finish mill clinker bin transfer, identified as EU44.
- (90) One (1) 2D finish mill clinker / gypsum feed circuit, identified as EU45.
- (91) One (1) 2D finish mill roll press circuit with surge bin, identified as EU46.
- (92) One (1) 2D finish mill circuit, identified as EU47.

Finish Product 501-Silos Storage and Packing Facilities

- (93) 501-Silos 25-44, identified as EU54.
- (94) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- (95) One (1) BIC packer for loading cement into bags, identified as EU56.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- (96) 506-Silos 56-73, identified as EU53.
- (97) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.
- (98) One (1) north packer #1 for loading cement into bags, identified as EU59.
- (99) One (1) center packer #2 for loading cement into bags, identified as EU60.
- (100) One (1) south packer #3 for loading cement into bags, identified as EU61.
- (101) One (1) bag compression station, identified as EU62.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- (102) 504-Silos 45-48, and 50-55, identified as EU51.
- (103) One (1) bulk loading station for trucks and railroad cars, identified as EU52.
- (104) 504 Silos Bank/Silo 49 (CKD sales), identified as EU153.
- (105) CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- (106) 502-Silos 1, 2, and 7-11, identified as EU50.

Insignificant Activities: Note: Complete insignificant activity descriptions are in Section A.3.

Finish Product 501-Silos Storage and Packing Facilities

- (4) One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.

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

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

D.2.1 Prevention of Significant Deterioration (PSD) Minor Limits for PM/PM₁₀ [326 IAC 2-2]

Pursuant to Part 70 Permit T019-6016-00008 (issued June 15, 2004), in order to render the requirements of PSD not applicable, the following conditions shall apply:

- (a) The PM emissions from baghouses 261, DC35990, and DC35997 controlling the 2D finish mill roll press circuit with surge bin (EU46) shall not exceed 4.53 pounds per hour (limit for all three (3) baghouses combined).
- (b) The PM₁₀ emissions from baghouses 261, DC35990, and DC35997 controlling the 2D finish mill roll press circuit with surge bin (EU46) shall not exceed 2.71 pounds per hour (limit for all three (3) baghouses combined).
- (c) The PM emissions from baghouse 249 controlling the warehouse conveyor system (EU74) shall not exceed 4.58 pounds per hour.
- (d) The PM emissions from baghouse 265 controlling the CKD sales loadout spout (EU154) shall not exceed 1.15 pounds per hour.
- (e) The PM₁₀ emissions from baghouse 265 controlling the CKD sales loadout spout (EU154) shall not exceed 0.69 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable.

D.2.2 Particulate Matter (PM) Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, particulate emissions from each of the following facilities shall not exceed 0.03 grains per dry standard cubic foot (dscf) of exhaust air.

- (a) One (1) coal draw-up covered conveying system, identified as EU63.
- (b) Coal transfer tower, identified as EU64.
- (c) One (1) coal bin, identified as EU65.
- (d) Clinker can #1, identified as EU114.
- (e) One (1) #2 clinker drag conveyor, identified as EU30.
- (f) One (1) almond conveyor, identified as EU31.
- (g) One (1) cross belt, identified as EU119.
- (h) Clinker can #2, identified as EU120.
- (i) One (1) covered incline belt, identified as EU33.
- (j) North clinker storage building, identified as EU123.
- (k) One (1) 2D finish mill clinker / gypsum feed circuit, identified as EU45.
- (m) CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154.

- (n) One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.

D.2.3 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following operations shall each not exceed the pound per hour limit E when operating at the maximum process weight rate P.

- (a) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74.
- (b) One (1) clay crusher, identified as EU08.
- (c) One (1) #1 clinker drag conveyor, identified as EU23.
- (d) Apron conveyor, identified as EU24.
- (e) One (1) long belt, identified as EU25.
- (f) One (1) North clinker transfer tower, identified as EU32.
- (g) One (1) North reclaim clinker covered conveyor system, identified as EU34.
- (h) One (1) South reclaim clinker covered conveyor, identified as EU124.

- (i) One (1) Base tank (CKD), identified as EU146.
- (j) One (1) gypsum/stone/clinker transfer circuit ABC mills, identified as EU35.
- (k) Two (2) clinker elevators, identified as EU37.
- (l) One (1) 2BC finish mill feed belt, identified as EU132.
- (m) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- (n) One (1) finish mill circuit 2A, identified as EU39.
- (o) One (1) finish mill circuit 2B, identified as EU40.
- (p) One (1) finish mill circuit 2C, identified as EU42.
- (q) One (1) separator circuit, which includes an air transport system and pump, identified as EU43.
- (r) One (1) separator, which includes an air transport system and pump, identified as EU41.
- (s) One (1) BP tank for storing finished product (cement), identified as EU48.
- (t) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.
- (u) One (1) gypsum elevator, identified as EU135.
- (v) One (1) 2D finish mill clinker bin transfer, identified as EU44.
- (w) One (1) 2D finish mill roll press circuit with surge bin, identified as EU46.
- (x) One (1) 2D finish mill circuit, identified as EU47.
- (y) 501-Silos 25-44, identified as EU54.
- (z) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- (aa) One (1) BIC packer for loading cement into bags, identified as EU56.
- (bb) 506-Silos 56-73, identified as EU53.
- (cc) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.
- (dd) One (1) north packer #1 for loading cement into bags, identified as EU59.
- (ee) One (1) center packer #2 for loading cement into bags, identified as EU60.
- (ff) One (1) south packer #3 for loading cement into bags, identified as EU61.
- (gg) One (1) bag compression station, identified as EU62.
- (hh) 504-Silos 45-48, and 50-55, identified as EU51.
- (ii) One (1) bulk loading station for trucks and railroad cars, identified as EU52.
- (jj) 504 Silos Bank/Silo 49 (CKD sales), identified as EU153.
- (kk) 502-Silos 1, 2, and 7-11, identified as EU50.

The pounds per hour limitations (e) shall be calculated with the following equations:

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

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

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

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

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

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

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

Compliance Determination Requirements

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

- (a) Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to determine compliance with Condition D.2.1 - Prevention of Significant Deterioration (PSD) and Condition D.2.2 - Particulate Matter (PM) Limitations, the Permittee shall perform PM testing on baghouse 265 controlling CKD sales loadout spout (EU154).
- (b) Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to determine compliance with Condition D.2.1 - Prevention of Significant Deterioration (PSD), the Permittee shall perform PM₁₀ testing on baghouse 265 controlling CKD sales loadout spout (EU154).

Testing shall be conducted utilizing methods approved by the Commissioner and shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by the condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.6 Particulate Matter (PM) Control

- (a) In order to comply with Conditions D.2.1 - Prevention of Significant Deterioration (PSD) Minor Limit for PM/PM₁₀, D.2.2 - Particulate Matter (PM), and D.2.3 - Particulate Emissions, each baghouse for particulate control shall be in operation and control emissions at all times an associated facility, as listed in the table below, is in operation.

Unit ID (Unit Description)	Baghouse ID
EU74 - warehouse conveyor system for conveying bagged cement	249
EU08 - clay crusher	227
EU63 - coal draw-up covered conveying system	206
EU64 - coal transfer tower	207
EU65 - coal bin	208
EU23 - #1 clinker drag conveyor	217
EU24 - apron conveyor	218
EU114 - clinker can #1	31382
EU30 - #2 clinker drag conveyor	233
EU31 - almond conveyor	234
EU119 - cross belt for transferring clinker to the long belt	218
EU120 - clinker can #2	31382
EU25 - long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower	218 / 35925
EU32 - north clinker transfer tower	35925
EU33 - covered incline belt	35931
EU34 - north reclaim clinker covered conveyor system	35927
EU124 - south reclaim clinker covered conveyor	202 / 31499
EU146 - Base tank (CKD)	143
EU35 - gypsum/stone/clinker transfer circuit ABC mills	131 / 31495 / 31496
EU37 - clinker elevators	133
EU38 - 2A hopper / preliminary ball mill	133
EU39 - finish mill circuit 2A	134
EU40 - finish mill circuit 2B	135
EU42 - finish mill circuit 2C	137

Unit ID (Unit Description)	Baghouse ID
EU43 - separator circuit, which includes an air transport system and pump (finish mill circuit 2C)	138
EU41 - separator, which includes an air transport system and pump (finish mill circuit 2B)	136
EU48 - BP tank for storing finished product (cement)	144
EU49 - pump used to transfer finished product (cement) from the BP tank to silos	146
EU135 - gypsum elevator (2D finish mill circuit)	120
EU44 - 2D finish mill clinker bin transfer	120
EU45 - 2D finish mill clinker / gypsum feed circuit	31497 / 31498 / 36643
EU46 - 2D finish mill roll press circuit with surge bin	261 / DC35990 / DC35997
EU47 - 2D finish mill circuit	139 / 36643
EU54 - 501-Silos 25-44	224 / 225 / 246 / 150 / 151
EU55 - BIC mixer for mixing lime and pigment with the cement	224 and 225
EU56 - BIC packer for loading cement into bags	224 and 225
EU53 - 506-Silos 56-73	159 - 172
EU57 - bulk loading station	176
EU58 - bulk loading station	177
EU59 - north packer #1 for loading cement into bags	173
EU60 - center packer #2 for loading cement into bags	174
EU61 - south packer #3 for loading cement into bags	175
EU62 - bag compression station	242
EU51 - 504-Silos 45-48, and 50-55	153 - 156
EU52 - bulk loading station for trucks and railroad cars	152
EU153 - 504 Silos Bank/Silo 49 (CKD sales)	264
EU154 - CKD sales loadout spout for CKD destined for sale and/or reuse into process	265
EU50 - 502-Silos 1, 2, and 7-11	148 / 149

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

D.2.7 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least 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 visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: warehouse conveyors system for conveying bagged cement (EU74), clay crusher (EU08), coal

draw-up covered conveying system (EU63), #1 clinker drag conveyor (EU23), apron conveyor (EU24), clinker can #1 (EU114), #2 clinker drag conveyor (EU30), almond conveyor (EU31), cross belt (EU119), clinker can #2 (EU120), long belt (EU25), north clinker transfer tower (EU32), covered incline belt (EU33), north clinker storage building (EU123), north reclaim clinker covered conveyor system (EU34), clinker can #2 (EU120), south reclaim clinker covered conveyor (EU124), base tank (CKD) (EU146), gypsum/stone/clinker transfer circuit ABC mills (EU35), clinker elevators (EU37), 2BC finish mill feed belt (EU132), 2A hopper / preliminary ball mill used to grind clinker and gypsum (EU38), finish mill circuit 2A (EU39), finish mill circuit 2B (EU40), finish mill circuit 2C (EU42), separator circuit, which includes an air transport system and pump (EU43), separator, which includes an air transport system and pump (EU41), BP tank for storing finished product (cement) (EU48), pump used to transfer material from the BP tank to silos (EU49.), gypsum elevator (EU135), 2D finish mill clinker bin transfer (EU44), 2D finish mill clinker / gypsum feed circuit (EU45), 2D finish mill roll press circuit with surge bin (EU46), 2D finish mill circuit (EU47), 501-Silos 25-44 (EU54), BIC mixer for mixing lime and pigment with the cement (EU55), BIC packer for loading cement into bags (EU56), 506-Silos 56-73 (EU53), bulk loading stations for railroad cars and trucks (EU57 and EU58), bag compression station (EU62), 504-Silos 45-48, and 50-55 (EU51), bulk loading station for trucks and railroad cars (EU52), 504 Silos Bank/Silo 49 (CKD sales) (EU153), CKD sales loadout spout for CKD destined for sale and/or reuse into process (EU154), and 502-Silos 1, 2, and 7-11 (EU50).

D.2.8 Baghouse Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse, used in conjunction with the facilities listed in this section, at least once per day when the associated facility is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 to 8.0 inches of water or the range established during the most recent stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: warehouse conveyors system for conveying bagged cement (EU74), clay crusher (EU08), coal draw-up covered conveying system (EU63), #1 clinker drag conveyor (EU23), apron conveyor (EU24), clinker can #1 (EU114), #2 clinker drag conveyor (EU30), almond conveyor (EU31), cross belt (EU119), clinker can #2 (EU120), long belt (EU25), north clinker transfer tower (EU32), covered incline belt (EU33), north clinker storage building (EU123), north reclaim clinker covered conveyor system (EU34), clinker can #2 (EU120), south reclaim clinker covered conveyor (EU124), base tank (CKD) (EU146), gypsum/stone/clinker transfer circuit ABC mills (EU35), clinker elevators (EU37), 2BC finish mill feed belt (EU132), 2A hopper / preliminary ball mill used to grind clinker and gypsum (EU38), finish mill circuit 2A (EU39), finish mill circuit 2B (EU40), finish mill circuit 2C (EU42), separator circuit, which includes an air transport system and pump (EU43), separator, which includes an air transport system and pump (EU41), BP tank for storing finished product (cement) (EU48), pump used to transfer material from the BP tank to silos (EU49.), gypsum elevator (EU135), 2D finish mill clinker bin transfer (EU44), 2D finish mill clinker / gypsum feed circuit (EU45), 2D finish mill roll press circuit with surge bin (EU46), 2D finish mill circuit (EU47), 501-Silos 25-44 (EU54), BIC mixer for mixing lime and pigment with the cement (EU55), BIC packer for loading cement into bags (EU56), 506-Silos 56-73 (EU53), bulk loading stations for railroad cars and trucks (EU57 and EU58), bag compression station (EU62), 504-Silos 45-48, and 50-55 (EU51), bulk loading station for trucks and railroad cars (EU52), 504 Silos Bank/Silo 49 (CKD sales) (EU153), CKD sales loadout spout for CKD destined for sale and/or reuse into process (EU154), and 502-Silos 1, 2, and 7-11 (EU50).

D.2.9 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.7 - Visible Emissions Notations, the Permittee shall maintain records of visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

- (b) To document the compliance status with Condition D.2.8 - Baghouse Parametric Monitoring, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

SECTION D.3 FACILITY OPERATION CONDITIONS - Raw Mill Facilities, Coal Handling, Milling, and Storage Facilities, Kilns and Clinker Coolers

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

Raw Mill Facilities

- (107) Two (2) pneumatic truck unloading stations to fly ash tanks (EU10 and EU11), identified as EU107 and EU108.
- (108) One (1) iron ore hopper, identified as EU109.
- (109) One (1) bottom ash hopper, identified as EU158.
- (110) Two (2) silos for flyash, identified as EU10 and EU11.
- (111) One (1) silo for iron ore, identified as EU12, equipped with one elevator, constructed in 1977.
- (112) One (1) C-15 covered conveyor system, identified as EU09.
- (113) One (1) Loesche raw mill, identified as EU14.
- (114) One (1) sidewinder (pneumatic transfer pump), identified as EU15.
- (115) One (1) raw material pile, identified as EU112.
- (116) One (1) oil-fired furnace, referred to as the Todd Furnace, used for heating the Loesche raw mill, identified as EU13.
- (117) Feed silo #1 for kiln feed, identified as EU16.
- (118) Blend silo #2 for blending kiln feed, identified as EU17.
- (119) One (1) calibration system, identified as EU18.

Coal Handling, Milling and Storage Facilities

- (120) Coal (crusher) mill #1, identified as EU66.
- (121) Coal (crusher) mill #2, identified as EU67.
- (122) One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68.
- (123) One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69.
- (124) Kiln #2 pulverized coal silo, identified as EU149.
- (125) Kiln #2 coal weigh system, identified as EU150.
- (126) Kiln #2 burner pump system, identified as EU151.

The Kiln #1 and Kiln #2 Facilities

- (127) One (1) feed system for kiln #1, identified as EU19.
- (128) One (1) long dry process rotary cement kiln #1, identified as EU20.
- (129) One (1) feed system for kiln #2, identified as EU26.
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27.

The Clinker Cooler #1 Facilities

- (131) One (1) grate clinker cooler #1, identified as EU22.

The Clinker Cooler #2 Facilities

- (132) One (1) grate clinker cooler #2, identified as EU29.

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

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit for PM/PM₁₀ [326 IAC 2-2]

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

- (a) The PM emissions from filter 255 controlling the kiln #2 burner pump system (EU151) shall not exceed 0.27 pounds per hour.
- (b) The PM₁₀ emissions from filter 255 controlling the kiln #2 burner pump system (EU151) shall not exceed 0.16 pounds per hour.

- (c) The PM emissions from baghouse 253 controlling the kiln #2 pulverized coal silo (EU149) shall not exceed 3.65 pounds per hour.
- (d) The PM₁₀ emissions from baghouse 253 controlling the kiln #2 pulverized coal silo (EU149) shall not exceed 2.19 pounds per hour.
- (e) The PM emissions from filter 254 controlling the kiln #2 coal weigh system (EU150) shall not exceed 0.68 pounds per hour.
- (f) The PM₁₀ emissions from filter 254 controlling the kiln #2 coal weigh system (EU150) shall not exceed 0.41 pounds per hour.
- (g) The PM emissions from baghouse 228 controlling the elevator for transferring material from the hopper to the flyash tanks shall not exceed 5.68 pounds per hour.
- (h) The PM₁₀ emissions from baghouse 228 controlling the elevator for transferring material from the hopper to the flyash tanks shall not exceed 3.40 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) shall not apply.

D.3.2 Particulate Matter (PM) [326 IAC 6.5-2-4]

Pursuant to 326 IAC 326 IAC 6.5-2-4, the following conditions shall apply:

- (a) The combined particulate matter emissions from the kiln #2 system which includes kiln #2 equipped with an alkali bypass (EU27), the fuel oil-fired air preheater for kiln #2 (EU69), and clinker cooler #2 (EU29), shall not exceed 265.20 tons per year and 0.4 pound per ton of kiln feed (dry basis).
- (b) The combined particulate matter emissions from the kiln #1 system, which includes kiln #1 (EU20), the fuel oil-fired air preheater (EU68), and clinker cooler #1 (EU22), shall not exceed 251.20 tons per year and 0.58 pound per ton of kiln feed (dry basis).

D.3.3 Particulate Matter (PM) [326 IAC 6.5-1-2] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]

Pursuant to 326 IAC 6.5-1-2, particulate emissions from each of the following facilities shall not exceed 0.03 grains per dry standard cubic foot (dscf) of exhaust air.

- (a) Two (2) pneumatic truck unloading stations to fly ash tanks (EU10 and EU11), identified as EU107 and EU108.
- (b) One (1) silo for flyash, identified as EU11.
- (c) One (1) silo for iron ore, identified as EU12.
- (d) One (1) oil-fired Todd furnace used for heating the Loesche raw mill, identified as EU13.
- (e) Feed silo #1 for kiln feed, identified as EU16.
- (f) One (1) calibration system, identified as EU18.
- (g) Coal (crusher) mill #1, identified as EU66.
- (h) One (1) feed system for kiln #1, identified as EU19.
- (i) One (1) feed system for kiln #2, identified as EU26.

D.3.4 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the following operations shall each not exceed the pound per hour limit E when operating at the maximum process weight rate P.

- (a) One (1) silo for flyash, identified as EU10.
- (b) One (1) C-15 covered conveyor system, identified as EU09.
- (c) One (1) Loesche raw mill, identified as EU14.
- (d) One (1) sidewinder (pneumatic transfer pump), identified as EU15.
- (e) Blend silo #2 for blending kiln feed, identified as EU17.
- (f) Coal (crusher) mill #2, identified as EU67.
- (g) Kiln #2 pulverized coal silo, identified as EU149.

- (h) Kiln #2 coal weigh system, identified as EU150.
- (i) Kiln #2 burner pump system, identified as EU151.

The pounds per hour limitations (e) shall be calculated with the following equations:

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

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

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

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

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

D.3.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2] [326 IAC 7-2-1]

- (a) Pursuant to 326 IAC 7-1.1-2 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of coal or the simultaneous combustion of coal and oil, in kiln #1 and kiln #2 shall not exceed six (6.0) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.
- (b) Pursuant to 326 IAC 7-1.1-2 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of distillate oil only from each of the kilns shall not exceed five-tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.
- (c) Pursuant to 326 IAC 7-1.1-2 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of residual oil only from each of the kilns shall not exceed one and six-tenths (1.6) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.
- (d) Pursuant to 326 IAC 7-1.1-2 (SO₂ Emissions Limitations) the SO₂ emissions from each of the fuel oil-fired preheaters (EU68 and EU69) and the Todd furnace (EU13) shall not exceed 0.5 pound per MMBtu heat input when combusting distillate oil. Pursuant to 326 IAC 7-2-1, compliance shall be determined on a calendar month average.

D.3.6 NO_x Emissions [326 IAC 10-1] [326 IAC 10-3]

- (a) Pursuant to 326 IAC 10-1-4, NO_x emissions from the long dry rotary cement kiln #1 (EU20) shall not exceed ten and eight-tenths (10.8) pounds per ton of clinker produced on an operating day basis and six (6.0) pounds per ton of clinker produced on a thirty (30) day rolling average.
- (b) The following requirements apply to the dry preheater rotary cement kiln #2 (EU27):
 - (1) Pursuant to 326 IAC 10-1-4, NO_x emissions shall not exceed five and nine-tenths (5.9) pounds per ton of clinker produced on an operating day basis and four and four-tenths (4.4) pounds per ton clinker produced on a thirty (30) day rolling average basis.
 - (2) Pursuant to 326 IAC 10-3-3, after May 31, 2004 and during the ozone control period of each year, the Permittee shall comply with one (1) of the following:

- (A) The kiln shall operate with Low-NO_x burners; or
- (B) NO_x emissions shall not exceed 3.8 pounds per ton of clinker produced, averaged over the ozone control period.

D.3.7 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [326 IAC 10-3]

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

Compliance Determination Requirements

D.3.8 Testing Requirements [326 IAC 20-27-1][326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]

The Permittee shall test kiln #1 (EU20), kiln #2 equipped with alkali bypass (EU27) and associated preheater, clinker cooler #1 (EU22), clinker cooler #2 (EU29), kiln feed system #1 (EU19), and kiln feed system #2 (EU26) for PM emissions in order to demonstrate compliance with Condition D.3.2 - Particulate Matter (PM) (326 IAC 6.5-2-4) and Condition D.3.3 - Particulate Matter (PM) (326 IAC 6.5-1-2), utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.3.9 Particulate Matter (PM) Control

In order to comply with Conditions D.3.1 - Prevention of Significant Deterioration (PSD) Minor Limit, D.3.2 - Particulate Matter (PM), and D.3.3 - Particulate Matter (PM), the following conditions shall apply:

- (a) The baghouse 209 for PM control shall be in operation at all times and control emissions from the kiln #1 feed system when the kiln #1 feed system is in operation.
- (b) The baghouse 221 for PM control shall be in operation at all times and control emissions from the kiln #1 when the kiln #1 is in operation.
- (c) The baghouse 231 for PM control shall be in operation at all times and control emissions from the kiln #2 feed system when the kiln #2 feed system is in operation.
- (d) Baghouse 15 and baghouse 16, for PM control, shall be in operation at all times and control emissions from the kiln #2 and raw mill when the kiln #2 or the raw mill is in operation.
- (e) The baghouse 222 for PM control shall be in operation at all times and control emissions from the clinker cooler #1 when the clinker cooler #1 is in operation.
- (f) The baghouse 17 for PM control shall be in operation at all times and control emissions from the clinker cooler #2 when the clinker cooler #2 is in operation.
- (g) Each baghouse or filter controlling any of the coal handling, milling, and storage facilities shall be in operation at all times when the associated facility is in operation.
- (h) In the event that bag failure is observed in a multi-compartment bagfilter, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.3.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, compliance with the limit in Condition D.3.5(a) - Sulfur Dioxide (SO₂) shall be determined utilizing one of 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), and (e).
 - (2) Sample and analyze 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) Pursuant to 326 IAC 3-7-2(f), in lieu of the requirements of 326 IAC 3-7-2(d) the source may elect to determine the heat content of coal samples in accordance with the procedures specified in ASTM D5865.
 - (4) Sample and analyze the coal pursuant to 326 IAC 3-7-3.
- (b) Compliance may also 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, and 8. [326 IAC 7-2-1(d)]
- (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 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

D.3.11 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, compliance with the limit in Condition D.3.5 - Sulfur Dioxide (SO₂) shall be determined utilizing one of the following methods:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall determine that the sulfur dioxide emissions by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from each of the kilns and heaters, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

D.3.12 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [326 IAC 10-1] [326 IAC 10-3]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) continuous opacity monitoring systems (COMS) for kiln #1 (EU20), kiln #2 (EU27), clinker cooler #1 (EU22), and clinker cooler #2 (EU29) shall be installed, calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) Pursuant to 326 IAC 10-1-6 (Emissions Monitoring) and 326 IAC 10-3 (Monitoring and Testing Requirements), compliance with the NO_x limits for the kilns in Condition D.3.5 - NO_x Emissions continuous emissions monitoring systems (CEMS) for kiln #1 (EU20) and kiln #2 (EU27) shall be installed, calibrated, maintained, and operated for measuring Nitrogen Oxides (NO_x), which meet all applicable performance specifications of 326 IAC 3-5-2.
- (c) All continuous emission monitoring systems (CEMS) are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-1, 326 IAC 10-3, and 40 CFR 63, Subpart LLL.

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

D.3.13 Visible Emissions Notations

The emission units and associated baghouses for which continuous opacity monitors are not used shall comply with the following requirements:

- (a) Visible emission notations of the baghouse stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: pneumatic truck unloading stations to fly ash tanks (EU107 and EU108), silos for flyash (EU10 and EU11), silo for iron ore (EU12), C-15 covered conveyor system (EU09), Loesche raw mill (EU14), sidewinder (pneumatic transfer pump) (EU15), feed silo #1 for kiln feed (EU16), blend silo #2 (EU17), calibration system (EU18), coal (crusher) mill #1 (U66), coal (crusher) mill #2 (EU67), fuel oil-fired air preheater for kiln #1 coal mill (EU68), fuel oil-fired air preheater for kiln #2 coal mill (EU69), kiln #2 pulverized coal silo (EU149), kiln #2 coal weigh system (EU150), kiln #2 burner pump system (EU151), feed system for kiln #1 (EU19), rotary cement kiln #1 (EU20), feed system for kiln #2 (EU26), kiln #2 (EU27), clinker cooler #1 (EU22), and clinker cooler #2 (EU29).

D.3.14 Baghouse Parametric Monitoring

The emission units and associated baghouses for which continuous opacity monitors are not used shall comply with the following requirements:

- (a) The Permittee shall record the pressure drop across each baghouse, used in conjunction with the facilities listed in this section, at least once per day when the associated facility is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 to 8.0 inches of water or the range established during the most recent stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Compliance with these monitoring requirements satisfies, in part, CAM for the following units: pneumatic truck unloading stations to fly ash tanks (EU107 and EU108), silos for flyash (EU10 and EU11), silo for iron ore (EU12), C-15 covered conveyor system (EU09), Loesche raw mill (EU14), sidewinder (pneumatic transfer pump) (EU15), feed silo #1 for kiln feed (EU16), blend silo #2 (EU17), calibration system (EU18), coal (crusher) mill #1 (U66), coal (crusher) mill #2 (EU67), fuel oil-fired air preheater for kiln #1 coal mill (EU68), fuel oil-fired air preheater for kiln #2 coal mill (EU69), kiln #2 pulverized coal silo (EU149), kiln #2 coal weigh system (EU150), kiln #2 burner pump system (EU151), feed system for kiln #1 (EU19), rotary cement kiln #1 (EU20), feed system for kiln #2 (EU26), kiln #2 (EU27), clinker cooler #1 (EU22), and clinker cooler #2 (EU29).

D.3.15 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.3.16 NO_x Continuous Emissions Monitoring (CEMS) Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

In the event that a nitrogen oxide CEMS fails, the Permittee shall monitor the oxygen content and temperature of the kiln exhaust at least once per hour. If the oxygen content or temperature is outside the range established in the latest compliance stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.17 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.
 - (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
 - (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
 - (3) Method 9 readings may be discontinued once a COMS is online.
 - (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 60 and/or 40 CFR 63).

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

D.3.18 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.5 - Sulfur Dioxide (SO₂), D.3.10 - Sulfur Dioxide Emissions and Sulfur Content and D.3.11 - Sulfur Dioxide Emissions and Sulfur Content, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be complete and sufficient to determine compliance with the SO₂ emission limits established in Condition D.3.4 - Sulfur Dioxide (SO₂).
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual coal and oil usages since last compliance determination period;

- (3) Sulfur content and heat content of both coal and oil used;
 - (4) Sulfur dioxide emission rates.
- (b) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
 - (c) To document the compliance status with Section C - Opacity and Condition D.3.12 - Continuous Emissions Monitoring, the Permittee shall maintain records of (1) through (4) below. Records shall be complete and sufficient to determine compliance with the limits established in this section.
 - (1) Data and results from the most recent stack tests.
 - (2) All continuous emissions opacity monitoring data pursuant to 326 IAC 3-5.
 - (3) The results of all Method 9 opacity readings for the kilns and clinker coolers visible emission readings taken during any periods of COMS downtime.
 - (4) The results of the hourly observations of the oxygen content and temperature of the kiln exhaust taken during any periods of NO_x CEMS downtime.
 - (d) To document the compliance status with Condition D.3.13 - Visible Emissions, the Permittee shall maintain daily records of the visible emission notations of each baghouse stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).
 - (e) To document the compliance status with Condition D.3.14 - Baghouse Parametric Monitoring, the Permittee shall maintain daily records of the pressure drop across each baghouse. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
 - (f) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.3.19 Reporting Requirements

- (a) A quarterly summary of the information to document the compliance status with the SO₂ limits specified in Condition D.3.5 - Sulfur Dioxide (SO₂) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.
- (b) Pursuant to 326 IAC 10-1 and 326 IAC 10-3, CEM performance evaluation reports shall be submitted each calendar quarter.
- (c) Pursuant to 326 IAC 10-1, the source shall notify the OAQ at least thirty (30) days prior to the addition or modification of a facility that may result in a potential increase in NO_x emissions.
- (d) Pursuant to 326 IAC 10-1, the source may comply with the reporting requirements of 326 IAC 10-1 by submitting to the OAQ a substitute report. A substitute report is a report that satisfies an applicable state or federal reporting requirement and contains the information required to be submitted by this rule.

- (e) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7, from the continuous monitoring system, shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS - Degreasing Operations

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

Degreasing operations

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

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

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

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

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

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner organic solvent degreaser facility, performing organic solvent degreasing, construction of which commenced after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for a cold cleaning facility, performing organic solvent degreasing, construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.4.3 Material Requirements for Cold Cleaning Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaning Degreasers), the following conditions shall apply:

- (a) The source shall not operate a cold cleaning degreaser, performing organic solvent degreasing, with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) The source shall maintain the following records for each purchase:
 - (1) the name and address of the solvent supplier;
 - (2) the date of purchase;
 - (3) the type of solvent;
 - (4) the volume of each unit of solvent;
 - (5) the total volume of the solvent; and
 - (6) the true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

SECTION D.5 FACILITY OPERATION CONDITIONS - Insignificant Activities

Facility Description [326 IAC 2-7-5(14)]	Insignificant Activities
(2) Underground conveyors. [326 IAC 6.5-1-2]	
(3) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.5-1-2]	
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)	

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

D.5.1 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the allowable PM emissions from each of the underground conveyors, the coal bunker, and coal scale shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

SECTION E.1 PLANTWIDE APPLICABILITY LIMITATION REQUIREMENTS

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

The entire plant site is subject to the Plant wide Applicability Limitation [PAL] requirements described in this E section.

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

Source Wide Emission Limits [326 IAC 2-2.4-7(1)] [326 IAC 2-3.4-7(1)]

E.1.1 Emission Limits [326 IAC 2-2.4-7(1)][326 IAC 2-3.4-7(1)]

Oxides of Nitrogen (NO_x) emissions from the entire source shall not exceed 2,566 tons per rolling twelve (12) month period with compliance determined at the end of each month. This provision does not supersede any other NO_x emission limits contained in this permit.

General PAL Requirements [326 IAC 2-2.4-1] [326 IAC 2-3.4-1]

E.1.2 Major New Source Review Applicability [326 IAC 2-2.4-1(c)] [326 IAC 2-3.4-1(c)]

Any physical change or change in the method of operation of this source is not a major modification for NO_x, and not subject to the review requirements of 326 IAC 2-2 and 326 IAC 2-3, provided the actual emissions of NO_x from the entire source do not exceed the emission limit in Condition E.1.1 - Emission Limits of this permit.

E.1.3 General PAL Requirements [326 IAC 2-2.4-7 through 326 IAC 2-2.4-11][326 IAC 2-2.4-15][326 IAC 2-3.4-7 through 326 IAC 2-3.4-11][326 IAC 2-3.4-15]

- (a) The requirements of this E Section become effective on July 1, 2008 and expire ten years after that date.
- (b) If the Permittee applies to renew this PAL at least six months prior to expiration of the PAL, but no earlier than eighteen months prior to the expiration of the PAL, then notwithstanding the expiration date in subsection E.1.3(a), the PAL shall continue to be effective until the revised permit with the renewed PAL is issued. The application must contain the elements described in 326 IAC 2-2.4-3, 326 IAC 2-2.4-10, 326 IAC 2-3.4-3 and 326 IAC 2-3.4-10.
- (c) Once this PAL expires, if not otherwise renewed, then the requirements of 326 IAC 2-2.4-9 and 326 IAC 2-3.4-9 are applicable.
- (d) The requirements for renewing this PAL are described in 326 IAC 2-2.4-10 and 326 IAC 2-3.4-10.
- (e) The requirements for increasing the emissions limits described in Condition E.1.1 - Emission Limits are described in 326 IAC 2-2.4-11 and 326 IAC 2-3.4-11.
- (f) The requirements applicable to terminating or revoking this PAL are described in 326 IAC 2-2.4-15 and 326 IAC 2-3.4-15.

Monitoring Requirements [326 IAC 2-2.4-7(6) & (7)] [326 IAC 2-2.4-12] [326 IAC 2-3.4-7(6) & (7)] [326 IAC 2-3.4-12]

E.1.4 NO_x Emission Limit Determination [326 IAC 2-2.4-7(6) and (7)] [326 IAC 2-2.4-12] [326 IAC 2-3.4-7(6) and (7)] [326 IAC 2-3.4-12]

The Permittee shall install, calibrate, maintain and operate a NO_x continuous emission monitoring system (CEMS) on stacks S-14, S-15 and S-16. The CEMS shall be designed to determine actual emissions of NO_x as described below:

- (a) The Permittee shall comply with the requirements of Conditions D.3.12(c) through (d) - Continuous Emissions Monitoring.
- (b) Pursuant to 326 IAC 2-2.4-12(d) and 326 IAC 2-3.4-12(d), an owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (1) CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and
 - (2) CEMS must sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.

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

E.1.5 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-2.4-13] [326 IAC 2-3.4-13]

- (a) The Permittee shall retain a copy of all records necessary to determine compliance with the requirements of this E Section, including a determination of each emissions unit's twelve (12) month rolling total emissions, for five years from the date of the record. Those records include, but are not limited to, recorded data generated by the CEMS required by Condition E.1.4 - NO_x Emission Limit Determination.
- (b) The Permittee shall retain a copy of the PAL permit application, any applications for revisions to the PAL, each annual compliance certification as required by Condition B.9 - Annual Compliance Certification of this permit, and data relied on in the certification for the duration of the PAL plus five years.

E.1.6 Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-2.4-14] [326 IAC 2-3.4-14]

- (a) The Permittee shall submit a semi-annual report, containing the information described below, not later than thirty (30) days after the end of the semi-annual calendar period being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. This report requires a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). The report shall include the following information:
 - (1) The identification of the owner and operator of the source and the permit number.
 - (2) Total emissions of NO_x, in tons per rolling 12 month period for each month in the reporting period, as determined by Condition E.1.4 - NO_x Emission Limit Determination.
 - (3) All data relied upon, including but not limited to, any quality assurance or quality control data, in determining emissions.
 - (4) A list of any emissions units modified or added to the major stationary source during the reporting period.
 - (5) If not previously reported pursuant to another condition in this permit, the number, duration, and cause of any deviations or monitoring malfunctions, and any corrective action taken.
- (b) The procedures for reporting deviations from the requirements of this Section E, and the procedures for reporting emissions in excess of the limit in Condition E.1.1 - Emission Limits are described in Condition B.15 (Deviation from Permit Requirements and Conditions). A report that describes emissions exceeding the PAL limit shall include the quantity of emissions emitted by the source. This term satisfies the requirements of 326 IAC 2-2.4-14(c).

SECTION F.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]	Insignificant Activities
(121) Coal (crusher) mill #2, identified as EU67 servicing kiln #2, constructed in 1977. Note: for the purposes of Subpart Y applicability, this unit meets the definition of a thermal dryer.	
(123) One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69, constructed in 1977.	
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)	

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.1.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Y.
- (b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

F.1.2 Standards of Performance for Coal Preparation Plants [40 CFR Part 60, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Y, the Permittee shall comply with the provisions of the Standard of Performance for Coal Preparation Plants (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

- (1) 40 CFR 60.250 (a) and (b)
- (2) 40 CFR 60.251
- (3) 40 CFR 60.252 (a), (a)(1), and (a)(2)
- (4) 40 CFR 60.255 (a)
- (5) 40 CFR 60.256 (a), (a)(1), (a)(1)(i), (a)(2)
- (6) 40 CFR 60.257 (a), (b)(1), (b)(2), (b)(3), (b)(4), and (b)(5)
- (7) 40 CFR 60.258 (b)(2), (b)(3), (c), and (d)

SECTION F.2

FACILITY OPERATION CONDITIONS

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

Miscellaneous Facilities

- (43) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74.

Clay Processing Operations

- (44) Clay hopper, identified as EU105.
(45) One (1) covered conveyor system for transferring material from the clay hopper to the clay crusher, identified as EU106.
(46) One (1) clay crusher, identified as EU08. (Until September 9, 2013, this is an affected source under 40 CFR 63, Subpart LLL.)

Finish Operations Crane Storage Facilities

- (48) One (1) truck unloading station to Emergency BP stone storage pile or Crane storage pile, identified as EU127.
(49) One (1) truck unloading station to gypsum storage piles, identified as EU129.
(50) Crane storage building, including gypsum storage bin, stone storage bin, two (2) clinker storage bins, and stone, clinker, and gypsum storage piles, identified as EU131.

Fossil Fuel Storage and Handling Facilities

- (52) Coal trucks unloading to the coal storage piles and reserve coal storage piles, identified as EU136.
(55) One (1) coal draw-up covered conveying system for transferring material from the coal/alternate energy storage pile to the coal transfer tower, identified as EU63.
(56) Coal transfer tower, identified as EU64.
(57) One (1) coal bin, identified as EU65.

Kiln #1 Clinker Handling Facilities

- (58) One (1) #1 clinker drag conveyor for transferring clinker from clinker cooler #1 to the apron conveyor, identified as EU23.
(59) Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24.
(60) Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114.

Kiln #2 Clinker Handling Facilities

- (61) One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157.
(62) One (1) #2 clinker drag conveyor for transferring clinker from clinker cooler #2 to the aumond conveyor, identified as EU30.
(63) One (1) aumond conveyor used for transferring clinker and clinker dust from the #2 clinker drag conveyor, #2 cooler, and baghouse 17 to the clinker can #2 or the cross belt, identified as EU31.
(64) One (1) cross belt for transferring clinker to the long belt, identified as EU119.
(65) Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120.

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Clinker Handling to Crane Storage Facilities

- (66) One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25.
- (67) One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt, identified as EU32.
- (68) One (1) covered incline belt used for transferring clinker from the North clinker transfer tower to the Shuttle Belt then to the North clinker storage building, identified as EU33.
- (69) One (1) clinker storage pile, identified as EU121. (On and after September 9, 2013, this is affected source under 40 CFR 63, Subpart LLL.)
- (70) North clinker storage pile, identified as EU122. (On and after September 9, 2013, this is affected source under 40 CFR 63, Subpart LLL.)
- (71) North clinker storage building, identified as EU123.
- (72) One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44), identified as EU34.
- (73) One (1) South reclaim clinker covered conveyor used to transfer clinker from the North reclaim clinker covered conveyor system to the crane storage building, identified as EU124.
- (74) Truck loading station, used for loading material from the North clinker storage pile and clinker storage pile, identified as EU125.
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126.

2ABC Finish Mill Facilities

- (76) One (1) Base tank (CKD), identified as EU146.
- (77) One (1) gypsum/stone/clinker transfer circuit ABC mills, including material transfers and scales, identified as EU35.
- (78) Two (2) clinker elevators, identified as EU37.
- (79) One (1) 2BC finish mill feed belt, identified as EU132.
- (80) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- (81) One (1) finish mill circuit 2A, which includes three (3) elevators, finish mill, separator, and air transport system, collectively identified as EU39.
- (82) One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU40.
- (83) One (1) finish mill circuit 2C, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU42.
- (84) One (1) separator circuit, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2C, identified as EU43.
- (85) One (1) separator, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2B, identified as EU41.
- (86) One (1) BP tank for storing finished product (cement), identified as EU48.
- (87) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.

2D Finish Mill Facilities

- (88) One (1) gypsum elevator used to transfer material from the gypsum storage piles to the 2D finish mill circuit, identified as EU135.
- (89) One (1) 2D finish mill clinker bin transfer, which includes the elevator, conveyor belts, and air transport system, identified as EU44.

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2D Finish Mill Facilities (continued)

- (90) One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45.
- (91) One (1) 2D finish mill roll press circuit, which includes a roller press (crusher) with surge bin, identified as EU46.
- (92) One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and a cement cooler, identified as EU47.

Finish Product 501-Silos Storage and Packing Facilities

- (93) 501-Silos 25-44, identified as EU54.
- (94) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- (95) One (1) BIC packer for loading cement into bags, identified as EU56.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- (96) 506-Silos 56-73, identified as EU53.
- (97) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.
- (98) One (1) north packer #1 for loading cement into bags, identified as EU59.
- (99) One (1) center packer #2 for loading cement into bags, identified as EU60.
- (100) One (1) south packer #3 for loading cement into bags, identified as EU61.
- (101) One (1) bag compression station, identified as EU62.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- (102) 504-Silos 45-48, and 50-55, identified as EU51.
- (103) One (1) bulk loading station for trucks and railroad cars, identified as EU52.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- (106) 502-Silos 1, 2, and 7-11, identified as EU50.

Raw Mill Facilities

- (107) Two (2) pneumatic truck unloading stations, identified as EU107 and EU108.
- (108) One (1) iron ore hopper, identified as EU109.
- (109) One (1) bottom ash hopper, identified as EU158.
- (110) Two (2) silos for flyash, identified as EU10 and EU11.
- (111) One (1) silo for iron ore, identified as EU12.
- (112) One (1) C-15 covered conveyor system for transferring material from the clay breaker, bottom ash hopper, iron ore tank, fly ash tanks, raw material pile, and the main limestone storage pile to the Loesche raw mill, identified as EU09.
- (113) One (1) Loesche raw mill, identified as EU14.
- (114) One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed to the feed and blend silos, identified as EU15.
- (116) One (1) oil-fired furnace, referred to as the Todd Furnace, used for Loesche mill heating, identified as EU13.
- (117) Feed silo #1 for kiln feed, identified as EU16.
- (118) Blend silo #2 for blending kiln feed, identified as EU17.
- (119) One (1) calibration system, identified as EU18.

Coal Handling, Milling and Storage Facilities

- (122) One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68.
- (123) One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69.
- (124) Kiln #2 pulverized coal silo, identified as EU149.

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Coal Handling, Milling and Storage Facilities (continued)

- (125) Kiln #2 coal weigh system, identified as EU150.
- (126) Kiln #2 burner pump system, identified as EU151.

The Kiln #1 and Kiln #2 Facilities

- (127) One (1) feed system for kiln #1, identified as EU19.
- (128) One (1) long dry process rotary cement kiln #1, identified as EU20.
- (129) One (1) feed system for kiln #2, identified as EU26.
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27.

The Clinker Cooler #1 Facilities

- (131) One (1) grate clinker cooler #1, identified as EU22.

The Clinker Cooler #2 Facilities

- (132) One (1) grate clinker cooler #2, identified as EU29.

Insignificant Activities: Note: Complete facility descriptions are in Section A.3

Finish Product 501-Silos Storage and Packing Facilities

- (4) **One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.**

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

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

**F.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under
40 CFR Part 63 [40 CFR Part 63, Subpart A] [326 IAC 20-1]**

- (a) Pursuant to 40 CFR 63, Subpart LLL, the Permittee shall comply with the provisions of 40 CFR Part 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, except as otherwise specified in 40 CFR Part 63, Subpart LLL.

- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

**F.2.2 National Emission Standards for Hazardous Air Pollutants from the Portland Cement
Manufacturing Industry [40 CFR Part 63, Subpart LLL]**

Pursuant to 40 CFR Part 63, Subpart LLL, on and after September 9, 2013, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (included as Attachment A of this permit) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011), for all the facilities listed in Section F.2 except EU08, as specified as follows:

- (a) 40 CFR 63.1340
- (b) 40 CFR 63.1341
- (c) 40 CFR 63.1342
- (d) 40 CFR 63.1343 (a)
- (e) 40 CFR 63.1343 (b)(1) Table 1: Lines 1 - 4, 9 - 10, and 13 - 16.
- (f) 40 CFR 63.1343 (b)(2)
- (g) 40 CFR 63.1343 (c), and (d)
- (h) 40 CFR 63.1343 (e) Table 2: Lines 1, 3, 5, 6, and 8.
- (i) 40 CFR 63.1344
- (j) 40 CFR 63.1345
- (k) 40 CFR 63.1346 (a), (b), and (f)
- (l) 40 CFR 63.1347
- (m) 40 CFR 63.1348 (applicable portions to be determined prior to September 2013)
- (n) 40 CFR 63.1349(a)
- (o) 40 CFR 63.1349(b)(1)
- (p) 40 CFR 63.1349 (b)(2) and (b)(3)
- (q) 40 CFR 63.1350(a)
- (r) 40 CFR 63.13450 (b) and (d)
- (s) 40 CFR 63.13450 (f)(1), (f)(2), and (f)(3)
- (t) 40 CFR 63.1350 (f)(4) and (g)
- (u) 40 CFR 63.1350 (h), (i), and (j)
- (v) 40 CFR 63.1350 (k) and (l)
- (w) 40 CFR 63.1350 (m)
- (x) 40 CFR 63.1350(n)
- (y) 40 CFR 63.1350(o)
- (z) 40 CFR 63.1350(p)
- (aa) 40 CFR 63.1351
- (bb) 40 CFR 63.1352
- (cc) 40 CFR 63.1353
- (dd) 40 CFR 63.1354 (a), (b)(1) through (b)(8)
- (ee) 40 CFR 63.1354 (9)(i) through (9)(v)
- (ff) 40 CFR 63.1354(9)(vi)
- (gg) 40 CFR 63.1354(10)
- (hh) 40 CFR 63.1354(c)
- (ii) 40 CFR 63.1355 (a) through (d)
- (jj) 40 CFR 63.1355 (e), (f), and (g)
- (kk) 40 CFR 63.1356
- (ll) 40 CFR 63.1357
- (mm) 40 CFR 63.1358
- (nn) 40 CFR 63.1359: Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions (applicable portions)

F.2.3 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry [40 CFR Part 63, Subpart LLL] [326 IAC 20-27]

Pursuant to 40 CFR Part 63, Subpart LLL, until September 9, 2013, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (included as Attachment B of this permit), *that were in effect or became effective December 20, 2006*, as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), for all the facilities listed in Section F.2 except EU121 and EU122, as specified as follows:

- (a) 40 CFR 63.1340
- (b) 40 CFR 63.1341
- (c) 40 CFR 63.1342
- (d) 40 CFR 63.1343 (a) and (b),
- (e) 40 CFR 63.1344 (a), (b), (f) and (g)
- (f) 40 CFR 63.1345

- (g) 40 CFR 63.1347
- (h) 40 CFR 63.1348
- (i) 40 CFR 63.1349 (a), (b)(1) and (b)(2),
- (j) 40 CFR 63.1349 (b)(3)(i), (ii), (iii) and (iv)
- (k) 40 CFR 63.1349(b)(4)(i)
- (l) 40 CFR 63.1349 (c), (d) and (e)
- (m) 40 CFR 63.1350 (a), (b), (c)(1), (d)(1) and (3), (e) and (f)
- (n) 40 CFR 63.1350 (h)(1) and (4), (i), (j), (k) (l), (n), (o), and (p)
- (o) 40 CFR 63.1352
- (p) 40 CFR 63.1354
- (q) 40 CFR 63.1355
- (r) 40 CFR 63.1356
- (s) 40 CFR 63.1357
- (t) 40 CFR 63.1358
- (21) Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions

F.2.4 National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry [40 CFR Part 63, Subpart LLL] [326 IAC 20-27]

Consistent with the U.S. EPA interpretation in Consent Decree 4:07-CV-0157, the provisions listed under 40 CFR 63.1343(b)(2) and 40 CFR 63.1348 shall apply to Stack S-15 as follows:

- (a) Stack S-15 shall not exceed twenty percent (20%) opacity when the Todd furnace (EU13) and the Loesche raw mill (EU14) are operating and the Loesche raw mill inlet damper is open and the fourth stage kiln gas temperatures are higher than two hundred degrees Fahrenheit (200°F).
- (b) Stack S-15 shall not exceed ten percent (10%) opacity when the Todd furnace (EU13) is operating in any configuration other than the configuration stated in F.2.4(a).
- (c) Stack S-15 shall not exceed twenty percent (20%) opacity when the Todd furnace (EU13) is not operating but kiln #2 (EU26) and the Loesche mill (EU14) are operating or kiln #2 alone is operating.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE and ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) |
| X The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and |
| X The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16. |

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report for Use When Combusting Only Coal

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008
Facility: Kilns #1 and 2
Parameter: Sulfur Dioxide (SO₂) emissions
Limit: 6.0 pounds per million Btu heat input

FACILITY: _____ YEAR: _____

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

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

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

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

Part 70 Quarterly Report for Use When Combusting Only Fuel Oil

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008
Facility: Kilns #1 and 2
Parameter: Sulfur Dioxide (SO₂) emissions from fuel oil combustion
Limit: 0.5 pounds per million Btu heat input

FACILITY: _____ YEAR: _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (Gallons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

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

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

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

**Part 70 Quarterly Report for Use
 When Combusting Coal and Fuel Oil Simultaneously**

Source Name: Essroc Cement Corporation
 Source Address: 301 Highway 31, Speed, Indiana 47172-1305
 Part 70 Permit Renewal No.: T019-26989-00008
 Facility: Kilns #1 and 2
 Parameter: Sulfur Dioxide (SO₂) emissions from the simultaneous combustion of coal and oil
 Limit: 6.0 pounds per million Btu heat input

Compliance with the SO₂ limit shall be determined using the following equation:

$$\text{SO}_2 \text{ emissions (lbs/MMBtu)} = (\text{Fuel oil usage} \times \text{EF coefficient} \times \text{fuel oil sulfur content} + \text{coal usage} \times \text{EF coefficient} \times \text{coal sulfur content}) / (\text{fuel oil usage} \times \text{HHV oil} + \text{coal usage} \times \text{HHV coal}).$$

FACILITY: _____ YEAR: _____

Month	Monthly Average Sulfur Content (%)		Monthly Average Heat Content (MMBtu/lb)		Month Fuel Consumption		Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)
	Coal	Fuel Oil	Coal	Fuel Oil	Coal (tons)	Fuel Oil (gallons)	This Month
1							
2							
3							

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

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

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

Part 70 Quarterly Report

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008
Facility: Fuel oil-fired preheaters (EU13, EU68, and EU69)
Parameter: Sulfur Dioxide (SO₂) emissions
Limit: 0.5 pounds per million Btu heat input

FACILITY: _____ YEAR: _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (Gallons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

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

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

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

Part 70 Quarterly Report

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008
Facility: Quarry drilling
Parameter: Number of holes drilled
Limit: 38,000 per 12 consecutive month period

YEAR:

Facility	Month	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
quarry drilling	Month 1			
	Month 2			
	Month 3			

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

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

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

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

Source Name: Essroc Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008

Months: _____ to _____ Year: _____

Page 1 of 2

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

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Attachment A

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Source: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §60.251, §60.252(a), §60.253(a), §60.254(a), §60.255(a), and §60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in §60.251, §60.252(b)(1) and (c), §60.253(b), §60.254(b), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after April 28, 2008, and on or before May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in §60.251, §60.252(b)(1) through (3), and (c), §60.253(b), §60.254(b) and (c), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act (Act) and in subpart A of this part.

(a) *Anthracite* means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

(b) *Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a fabric filter to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

(c) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference— see §60.17).

(d) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— see §60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— see §60.17), and coal refuse.

(e) *Coal preparation and processing plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.

(g) *Coal refuse* means waste products of coal mining, physical coal cleaning, and coal preparation operations (e.g. culm, gob, etc.) containing coal, matrix material, clay, and other organic and inorganic material.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Design controlled potential PM emissions rate* means the theoretical particulate matter (PM) emissions (Mg) that would result from the operation of a control device at its design emissions rate (grams per dry standard cubic meter (g/dscm)), multiplied by the maximum design flow rate (dry standard cubic meter per minute (dscm/min)), multiplied by 60 (minutes per hour (min/hr)), multiplied by 8,760 (hours per year (hr/yr)), divided by 1,000,000 (megagrams per gram (Mg/g)).

(j) *Indirect thermal dryer* means a thermal dryer that reduces the moisture content of coal through indirect heating of the coal through contact with a heat transfer medium. If the source of heat (the source of combustion or furnace) is subject to another subpart of this part, then the furnace and the associated emissions are not part of the affected facility. However, if the source of heat is not subject to another subpart of this part, then the furnace and the associated emissions are part of the affected facility.

(k) *Lignite* means coal that is classified as lignite A or B according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

(l) *Mechanical vent* means any vent that uses a powered mechanical drive (machine) to induce air flow.

(m) *Open storage pile* means any facility, including storage area, that is not enclosed that is used to store coal, including the equipment used in the loading, unloading, and conveying operations of the facility.

(n) *Operating day* means a 24-hour period between 12 midnight and the following midnight during which coal is prepared or processed at any time by the affected facility. It is not necessary that coal be prepared or processed the entire 24-hour period.

(o) *Pneumatic coal-cleaning equipment* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).

(p) *Potential combustion concentration* means the theoretical emissions (nanograms per joule (ng/J) or pounds per million British thermal units (lb/MMBtu) heat input) that would result from combustion of a fuel in an uncleaned state without emission control systems, as determined using Method 19 of appendix A-7 of this part.

(q) *Subbituminous coal* means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

(r) *Thermal dryer* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.

(s) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

§ 60.252 Standards for thermal dryers.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)); and

(2) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.

(b) Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO₂), and combined nitrogen oxides (NO_x) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.

(1) The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).

(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.

(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.

(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.

(2) Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO₂ emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or

(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO₂ in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO₂ in excess of 10 percent of the potential combustion concentration (*i.e.*, the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO₂ limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO₂ limits of this section.

(3) Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined NO_x and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of NO_x and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.

(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of NO_x and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO_x limit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined NO_x and CO limits of this section.

(c) Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.

§ 60.253 Standards for pneumatic coal-cleaning equipment.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.

(c) The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

(2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

(3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.

(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.

(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).

(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.

(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.

(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.

(5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.

(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(6) Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

§ 60.255 Performance tests and other compliance requirements.

(a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.

(b) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.

(1) For each affected facility subject to a PM, SO₂, or combined NO_x and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

(2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e) and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in §60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.

(c) If any affected coal processing and conveying equipment (e.g., breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in § 60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.

(d) An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.

(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

(2) The control device manufacturer's recommended maintenance procedures are followed, and

(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.

(e) For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

- (2) The manufacturer's recommended maintenance procedures are followed for each control device; and
- (3) A performance test is conducted on each affected facility at least once every 5 calendar years.
- (f) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.
- (1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.
- (i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.
- (ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.
- (iii) Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.
- (2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.
- (g) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.
- (1) The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.
- (2) The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.
- (i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.
- (ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero

adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.

(h) The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.

(1) Conduct an initial performance test using Method 9 of appendix A-4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).

(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

(2) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(3) Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.

§ 60.256 Continuous monitoring requirements.

(a) The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.

(1) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(i) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ± 1.7 °C (± 3 °F).

(ii) For affected facilities that use wet scrubber emission control equipment:

(A) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge.

(B) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water supply

pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

(2) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

(b) The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.

(1) For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.

(2) For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water supply flow rate.

(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design pH.

(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(3) For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(c) Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.

(1) The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

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

(2) The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

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

(iii) Operation of the bag leak detection system, including quality assurance procedures;

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

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

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

(ii) Sealing off defective bags or filter media;

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

(iv) Sealing off a defective fabric filter compartment;

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

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

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

(b) The owner or operator must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emissions standards specified in §60.252 according to the requirements in §60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.

(1) Method 1 or 1A of appendix A–4 of this part shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A–4 of this part shall be used to determine the volumetric flow rate of the stack gas.

(3) Method 3, 3A, or 3B of appendix A–4 of this part shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses (incorporated by reference— see §60.17) as an alternative to Method 3B of appendix A–2 of this part.

- (4) Method 4 of appendix A–4 of this part shall be used to determine the moisture content of the stack gas.
- (5) Method 5, 5B or 5D of appendix A–4 of this part or Method 17 of appendix A–7 of this part shall be used to determine the PM concentration as follows:
- (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.
 - (ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.
 - (iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.
 - (iv) Method 5D of appendix A–4 of this part shall be used for positive pressure fabric filters and other similar applications (e.g., stub stacks and roof vents).
 - (v) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.
- (6) Method 6, 6A, or 6C of appendix A–4 of this part shall be used to determine the SO₂ concentration. A minimum of three valid test runs are needed to comprise an SO₂ performance test.
- (7) Method 7 or 7E of appendix A–4 of this part shall be used to determine the NO_x concentration. A minimum of three valid test runs are needed to comprise an NO_x performance test.
- (8) Method 10 of appendix A–4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO_x performance tests.

§ 60.258 Reporting and recordkeeping.

- (a) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:
- (1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.
 - (2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.
 - (3) The amount and type of coal processed each calendar month.
 - (4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.
 - (5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>. For performance tests that cannot be entered into WebFIRE (*i.e.*, Method 9 of appendix A-4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

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[Subpart Y--STANDARDS OF PERFORMANCE FOR COAL PREPARATION PLANTS](#)

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

Attachment B

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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

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

General

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[75 FR 55051, Sept. 9, 2010]

§ 63.1341 Definitions.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hazardous waste is defined in §261.3 of this chapter.

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

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

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

Kiln exhaust gas bypass means alkali bypass.

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

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

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

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

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

Portland cement plant means any facility manufacturing portland cement.

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

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

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

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

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

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

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

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

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

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

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

[71 FR 76549, Dec. 20, 2006]

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

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

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

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

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

	If your source is	And the operating mode is:	And if is located	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
11.	A new clinker cooler	Normal operation	At a major or area source	PM—0.01	lb/ton clinker	NA.
12.	A new clinker cooler	Startup and shutdown	At a major or area source	PM—0.0008	gr/dscf	NA.
13.	An existing or new raw material dryer	Normal operation	At a major or area source	THC—24 ^{2,3}	ppmvd	19 percent.
14.	An existing or new raw material dryer	Startup and shutdown	At a major or area source	THC—24 ^{2,3}	ppmvd	NA.
15.	An existing or new raw material dryer	All operating modes	At a major source	Opacity—10	percent	NA.
16.	An Existing or new raw or finish mill	All operating modes	At a major source	Opacity-10	percent	NA.

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

²Measured as propane.

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

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

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

$$PM_{2.5} = 0.004 \times 1.65 \times (Q_1 + Q_c) / 7000 \quad (\text{Eq. 1})$$

Where:

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

1.65 is the conversion factor of lb feed per lb clinker

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

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

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

$$PM_{air} = 0.0008 \times 1.65 \times ((Q_k + Q_c) / 1000) \quad (\text{Eq. 2})$$

Where:

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

1.65 is the conversion factor of lb feed per lb clinker

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

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

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

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

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

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

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

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

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

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

If your source is	and	And if it is located at	Your emissions limits are¹:	And the units of the emissions limit are:
1. An existing kiln	it commenced construction or reconstruction on or prior to December 2, 2005	A major source	PM—0.3 Opacity—20 D/F—0.2 ² THC—50 ³⁴	lb/ton feed percent ng/dscm (TEQ) ppmvd.
2. An existing kiln	it commenced construction or reconstruction after December 2, 2005	A major source	PM—0.3 Opacity—20 D/F—0.2 ² THC—20 ³⁵ Mercury—41 ⁶	lb/ton feed percent ng/dscm (TEQ) ppmvd ug/dscm.
3. An existing kiln	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	D/F—0.2 ² THC—50 ³⁴	ng/dscm (TEQ) ppmvd.
4. An existing kiln	it commenced construction or reconstruction after December 2, 2005	An area source	D/F—0.2 ² THC—20 ³⁵ Mercury—41 ⁶	ng/dscm (TEQ) ppmvd ug/dscm.
5. An existing clinker cooler	NA	A major source	PM—0.1 Opacity—10	lb/ton feed percent.
6. An existing raw material dryer	it commenced construction or reconstruction on or prior to December 2, 2005	A major source	THC—50 ³⁴ Opacity—10	ppmvd percent.
7. An existing raw material dryer	it commenced construction or reconstruction after December 2, 2005	A major source	THC—20 ³⁵ Opacity—10	ppmvd percent.
8. An existing raw material dryer	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	THC—50 ³⁴	ppmvd.
9. An existing raw material dryer	it commenced construction or reconstruction after December 2, 2005	An area source	THC—20 ³⁵	ppmvd.

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

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

³Measured as propane.

⁴Only applies to Greenfield kilns or raw material dryers.

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

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

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

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

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

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

(1) The excess emissions:

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

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

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

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

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

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

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

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

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

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

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

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

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

[75 FR 55053, Sept. 9, 2010]

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

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

[75 FR 55054, Sept. 9, 2010]

§ 63.1346 Operating limits for kilns.

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

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

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

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

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

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

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

(2) You must either:

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

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

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

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

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

[75 FR 55054, Sept. 9, 2010]

§ 63.1347 Operation and maintenance plan requirements.

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

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

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

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

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

[75 FR 55054, Sept. 9, 2010]

§ 63.1348 Compliance requirements.

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

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

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

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

(2) *Opacity compliance.* If you are subject to the limitations on opacity under §63.1345, you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in §63.1349(b)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.

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

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

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

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

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

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

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

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

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

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

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

(i) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(6)(i). The HCl concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance. You must also have established appropriate site-specific parameter limits.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of this section, including when the planned operational change period would begin.

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

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

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

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

[75 FR 55055, Sept. 9, 2010]

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

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

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

(2) Sampling location description(s);

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

(4) Test results;

(5) Quality assurance procedures and results;

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

- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for monitoring; and
- (10) Any other information required by the performance test method.

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

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

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

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

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

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

Where:

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

C_s = concentration of particulate matter, gr/scf;

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

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

K = conversion factor, 7000 gr/lb.

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

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

Where:

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

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

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

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

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

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

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

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

(i) There are no individual readings greater than 10 percent opacity;

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

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

(i) Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and, where applicable, the temperature at the inlet to the alkali bypass PMCD must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) Hourly average temperatures must be calculated for each run of the performance test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(v)(A) If sorbent injection is used for D/F control, the rate of sorbent injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test in accordance with the conditions in §63.1350(m)(9), and the continuous injection rate record(s) must be included in the performance test report. Sorbent injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(B) The performance test report must include the brand and type of sorbent used during the performance test.

(C) The owner or operator must maintain a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the performance test. If the carrier gas flow rate is used, the owner or operator must determine, record, and maintain a record of the accuracy of the carrier gas flow rate monitoring system according to the procedures in appendix A to part 75 of this chapter. If the carrier gas pressure drop is used, the owner or operator

must determine, record, and maintain a record of the accuracy of the carrier gas pressure drop monitoring system according to the procedures in §63.1350(m)(6).

(vi) The run average sorbent injection rate must be calculated for each run and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

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

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

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

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

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

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

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

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

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

Where:

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

C_s = concentration of mercury, g/scm;

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

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

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

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

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

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

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

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

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

(d) *Performance test reporting requirements.*

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

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

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

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

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

[75 FR 55057, Sept. 9, 2010]

§ 63.1350 Monitoring requirements.

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

(b) *PM monitoring requirements for sources using PM CEMS.* (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of

appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.

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

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

(4) In order to calculate the 30-day or 7-day rolling average, collect readings at least every 15 minutes. Sum the hourly data to daily data and then into a 30-day rolling average. You must use all data, except those recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities, in calculations.

(c) [Reserved]

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

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

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

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

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

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

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

(e) [Reserved]

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the

raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(m) *Parameter monitoring requirements.* If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.

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

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

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

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

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

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

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

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

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

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

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

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

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

(iv) Check pressure tap pluggage daily.

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

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

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

- (i) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
- (ii) Ensure the sample is properly mixed and representative of the fluid to be measured.
- (iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.
- (8) [Reserved]
- (9) *Mass flow rate (for sorbent injection) monitoring requirements.* If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (m)(9)(i) through (iii) of this section.
 - (i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
 - (ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
 - (iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.
- (10) *Bag leak detection monitoring requirements.* If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.
 - (i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
 - (ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.
 - (iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.
 - (iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
 - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - (vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.
 - (vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
 - (viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (11) For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:
 - (i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
 - (ii) Sealing off defective bags or filter media;

- (iii) Replacing defective bags or filter media or otherwise repairing the control device;
 - (iv) Sealing off a defective fabric filter compartment;
 - (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
 - (vi) Shutting down the process producing the PM emissions.
- (n) *Continuous emissions rate monitoring system.* You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) and (2) of this section, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit.
- (1) You must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury or PM CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.
 - (2) The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate.
 - (3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.
 - (4) The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (n)(1) of this section.
 - (5) The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.
 - (6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.
 - (7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of this chapter for a discussion of CD).
 - (i) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).
 - (ii) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.
- (8) You must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to Part 60 of the chapter with the exceptions in paragraphs (n)(8)(i) and (n)(8)(ii) of this section.
- (i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.
 - (ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.
- (9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (n)(8).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

paragraph (n) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (o)(5) of this section.

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

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

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

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

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

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

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

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

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

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

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

(i) Installation of the BLDS;

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

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

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

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

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

§ 63.1351 Compliance dates.

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

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

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

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

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

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

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

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

[76 FR 2836, Jan. 18, 2011]

§ 63.1352 Additional test methods.

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

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

[75 FR 55063, Sept. 9, 2010]

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:

(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by §§63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).

(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by §63.9(h).

§ 63.1354 Reporting requirements.

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

- (i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);
- (ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and
- (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).
- (iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).
- (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).
- (vi) Monthly rolling average mercury, THC, PM, and HCl (if applicable) emissions levels in the units of the applicable emissions limit for each kiln, clinker cooler, and raw material dryer.
- (10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.
- (c) The semiannual report required by paragraph (b)(9) of this section must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1348(d), including actions taken to correct a malfunction.

[64 FR 31925, June 14, 1999, as amended at 75 FR 55063, Sept. 9, 2010]

§ 63.1355 Recordkeeping requirements.

- (a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
- (b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and
 - (1) All documentation supporting initial notifications and notifications of compliance status under §63.9;
 - (2) All records of applicability determination, including supporting analyses; and
 - (3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.
- (c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).
- (d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

- (e) You must keep records of the daily clinker production rates and kiln feed rates.
- (f) You must keep records of the occurrence and duration of each startup or shutdown.
- (g)(1) You must keep records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006; 75 FR 55064, Sept. 9, 2010]

Other

§ 63.1356 Sources with multiple emission limits or monitoring requirements.

If an affected facility subject to this subpart has a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.

[75 FR 55064, Sept. 9, 2010]

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

(a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any particulate matter and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and in-line kiln/raw mills.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.

(b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results, including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002]

§ 63.1358 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

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

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

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

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§ 63.1359 [Reserved]

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

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

Citation	Requirement	Applies to subpart LLL	Explanation
63.1(a)(1)–(4)	Applicability	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.1(a)(5)		No	[Reserved]
63.1(a)(6)–(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)–(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)–(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)–(5)	Extensions, Notifications	Yes.	
63.1(d)		No	[Reserved]
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)–(c)	Units and Abbreviations	Yes	
63.4(a)(1)–(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
63.4(b)–(c)	Circumvention, Severability	Yes	
63.5(a)(1)–(2)	Construction/Reconstruction	Yes	
63.5(b)(1)	Compliance Dates	Yes	
63.5(b)(2)		No	[Reserved]
63.5(b)(3)–(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]

Citation	Requirement	Applies to subpart LLL	Explanation
63.5(d)(1)–(4)	Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	
63.5(f)(1)–(2)	Approval of Construction/Reconstruction	Yes	
63.6(a)	Compliance for Standards and Maintenance	Yes	
63.6(b)(1)–(5)	Compliance Dates	Yes	
63.6(b)(6)		No	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)–(2)	Compliance Dates	Yes	
63.6(c)(3)–(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)–(2)	Operation & Maintenance	No	See §63.1348(d) for general duty requirement. Any reference to §63.6(e)(1)(i) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1348(d).
63.6(e)(3)	Startup, Shutdown Malfunction Plan	No	
63.6(f)(1)	Compliance with Emission Standards	No	Compliance obligations specified in subpart LLL.
63.6(f)(2)–(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)–(3)	Alternative Standard	Yes	
63.6(h)(1)	Opacity/VE Standards	No	Compliance obligations specified in subpart LLL.
63.6(h)(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]

Citation	Requirement	Applies to subpart LLL	Explanation
63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)–(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)–(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)–(3)	Performance Testing Requirements	Yes	§63.1349 has specific requirements.
63.7(b)	Notification	Yes	
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)(1)	Conduct of Tests	No	See §63.1349(e). Any reference to 63.7(e)(1) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1349(e).
63.7(e)(2)–(4)	Conduct of tests	Yes	
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	
63.7(h)	Waiver of Tests	Yes	
63.8(a)(1)	Monitoring Requirements	Yes	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)–(3)	Conduct of Monitoring	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.8(c)(1)–(8)	CMS Operation/Maintenance	Yes	Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes, except for the reference to the SSM Plan in the last sentence	
63.8(e)	Performance Evaluation for CMS	Yes	
63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)–(5)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of Performance Test	Yes	
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/opacity test under §63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)–(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)–(6)	Notification of Compliance Status	Yes	
63.9(i)	Adjustment of Deadlines	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.9(j)	Change in Previous Information	Yes	
63.10(a)	Recordkeeping/Reporting	Yes	
63.10(b)(1)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(i)–(ii)	General Recordkeeping Requirements	No	See §63.1355(g) and (h).
63.10(b)(2)(iii)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(iv)–(v)	General Recordkeeping Requirements	No	
63.10(b)(2)(vi)–(ix)	General Recordkeeping Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(2)–(4)		No	[Reserved]
63.10(c)(5)–(8)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]
63.10(c)(10)–(15)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(d)(1)	General Reporting Requirements	Yes	
63.10(d)(2)	Performance Test Results	Yes	
63.10(d)(3)	Opacity or VE Observations	Yes	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	No	See §63.1354(c) for reporting requirements. Any reference to §63.10(d)(5) in other General Provisions or in this subpart is to be treated as a cross-reference to §63.1354(c).

Citation	Requirement	Applies to subpart LLL	Explanation
63.10(e)(1)–(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
63.12(a)–(c)	State Authority and Delegations	Yes	
63.13(a)–(c)	State/Regional Addresses	Yes	
63.14(a)–(b)	Incorporation by Reference	Yes	
63.15(a)–(b)	Availability of Information	Yes	

[75 FR 55064, Sept. 9, 2010]

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

Attachment C

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart LLL—National Emission Standards for Hazardous Air Pollutants From the Portland Cement

Manufacturing Industry [as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), and 71 FR 76549-76552 (Dec. 20, 2006)]

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

General

§ 63.1340 Applicability and designation of affected sources.

(a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.

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

(1) Each kiln and each in-line kiln/raw mill at any major or area source, including alkali bypasses, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to and regulated under subpart EEE of this part;

(2) Each clinker cooler at any portland cement plant which is a major source;

(3) Each raw mill at any portland cement plant which is a major source;

(4) Each finish mill at any portland cement plant which is a major source;

(5) Each raw material dryer at any portland cement plant which is a major source and each greenfield raw material dryer at any portland cement plant which is a major or area source;

(6) Each raw material, clinker, or finished product storage bin at any portland cement plant which is a major source;

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

(8) Each bagging and bulk loading and unloading system at any portland cement plant which is a major source.

(c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.

(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72584, Dec. 6, 2002]

§ 63.1341 Definitions.

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

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

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

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

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

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

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

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

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

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

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

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

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

Hazardous waste is defined in §261.3 of this chapter.

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

Kiln means a device, including any associated preheater or precalciner devices, that produces clinker by heating limestone and other materials for subsequent production of portland cement.

Kiln exhaust gas bypass means alkali bypass.

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

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

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

Portland cement plant means any facility manufacturing portland cement.

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

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

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

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

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

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002]

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

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

[71 FR 76549, Dec. 20, 2006]

§ 63.1343 Standards for kilns and in-line kiln/raw mills.

(a) *General.* The provisions in this section apply to each kiln, each in-line kiln/raw mill, and any alkali bypass associated with that kiln or in-line kiln/raw mill. All gaseous, mercury and D/F emission limits are on a dry basis, corrected to 7 percent oxygen. All total hydrocarbon (THC) emission limits are measured as propane. The block averaging periods to demonstrate compliance are hourly for 20 ppmv total hydrocarbon (THC) limits and monthly for the 50 ppmv THC limit.

(b) *Existing kilns located at major sources.* No owner or operator of an existing kiln or an existing kiln/raw mill located at a facility that is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources, any gases which:

(1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(c) *Reconstructed or new kilns located at major sources.* No owner or operator of a reconstructed or new kiln or reconstructed or new inline kiln/raw mill located at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the bypass stack are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(4) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(5) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41 µg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 µg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

(d) *Existing kilns located at area sources.* No owner or operator of an existing kiln or an existing in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(2) Contain D/F in excess of 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(e) *New or reconstructed kilns located at area sources.* No owner or operator of a new or reconstructed kiln or new or reconstructed in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(2) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(3) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41 µg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 µg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

[71 FR 76549, Dec. 20, 2006]

§ 63.1344 Operating limits for kilns and in-line kiln/raw mills.

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

(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded.

(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded.

(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded.

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

(c) The owner or operator of an affected source subject to a mercury, THC or D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.

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

(2) The owner or operator shall either:

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

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

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

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

(f) Existing kilns and in-line kilns/raw mills must implement good combustion practices (GCP) designed to minimize THC from fuel combustion. GCP include training all operators and supervisors to operate and maintain the kiln and calciner, and the pollution control systems in accordance with good engineering practices. The training shall include methods for minimizing excess emissions.

(g) No kiln and in-line kiln/raw mill may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e. emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline.

(h) All kilns and in-line kilns/raw mills must remove (i.e. not recycle to the kiln) from the kiln system sufficient cement kiln dust to maintain the desired product quality.

(i) New and reconstructed kilns and in-line kilns/raw mills must not exceed the average hourly CKD recycle rate measured during mercury performance testing. Any exceedance of this average hourly rate is considered a violation of the standard.

[64 FR 31925, June 14, 1999, as amended at 67 FR 72585, Dec. 6, 2002; 71 FR 76550, Dec. 20, 2006]

§ 63.1345 Standards for clinker coolers.

(a) No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the clinker cooler any gases which:

(1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 lb per ton) of feed (dry basis) to the kiln.

(2) Exhibit opacity greater than ten percent.

(b) [Reserved]

§ 63.1346 Standards for new or reconstructed raw material dryers.

(a) New or reconstructed raw material dryers located at facilities that are major sources can not discharge to the atmosphere any gases which:

- (1) Exhibit opacity greater than ten percent, or
- (2) Contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

(b) New or reconstructed raw materials dryers located at a facility that is an area source cannot discharge to the atmosphere any gases which contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

[71 FR 76551, Dec. 20, 2006]

§ 63.1347 Standards for raw and finish mills.

The owner or operator of each new or existing raw mill or finish mill at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged from the mill sweep or air separator air pollution control devices of these affected sources any gases which exhibit opacity in excess of ten percent.

§ 63.1348 Standards for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.

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

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

(a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;

- (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for compliance monitoring; and
- (10) Any other information required by the test method.

(b) Performance tests to demonstrate initial compliance with this subpart shall be conducted as specified in paragraphs (b)(1) through (b)(4) of this section.

(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section. The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. The opacity exhibited during the period of the Method 5 of Appendix A to part 60 of this chapter performance tests required by paragraph (b)(1)(i) of this section shall be determined as required in paragraphs (b)(1)(v) through (vi) of this section.

(i) Method 5 of appendix A to part 60 of this chapter shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run shall be conducted for at least 1 hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the PM collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of this subpart. However, this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or inline kiln/raw mill feed rate, except for fuels, for each run.

(iii) The emission rate, E, of PM shall be computed for each run using equation 1:

$$E = (C_s Q_{sd}) / P \text{ (Eq. 1)}$$

Where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

c_s = concentration of PM, kg/dscm.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(iv) When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the main exhaust and alkali bypass of the kiln or in-line kiln/raw mill shall be tested simultaneously and the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk} Q_{sdk} + C_{sb} Q_{sdb}) / P \text{ (Eq. 2)}$$

Where:

E_c = the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, kg/Mg of kiln feed.

c_{sk} = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent, kg/dscm.

Q_{sdk} = volumetric flow rate of kiln or in-line kiln/raw mill effluent, dscm/hr.

c_{sb} = concentration of particulate matter in the alkali bypass gas, kg/dscm.

Q_{sdb} = volumetric flow rate of alkali bypass gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph (b)(1)(vi) of this section the opacity exhibited during the period of the Method 5 performance tests required by paragraph (b)(1)(i) of this section shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(vi) Each owner or operator of a kiln, in-line kiln/raw mill, or clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (b)(1)(v) of this section, conduct an opacity test in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of Performance Specification 1 (PS-1) of appendix B to part 60 of this chapter is not feasible, a test shall be conducted in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. The maximum six-minute average opacity shall be determined during the three Method 5 test runs, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (ii) of this section apply:

(i) There are no individual readings greater than 10 percent opacity;

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

(3) The owner or operator of an affected source subject to limitations on D/F emissions under this subpart shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of appendix A to part 60 of this chapter. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dsf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(4)(i) The owner or operator of an affected source subject to limitations on emissions of THC shall demonstrate initial compliance with the THC limit by operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 of this chapter. The duration of the performance test shall be three hours, and the average THC concentration (as calculated from the one-minute averages) during the three-hour performance test shall be calculated. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating.

(ii) The owner or operator of an affected source subject to limitations on emissions of THC who elects to demonstrate compliance with the alternative THC emission limit of 98 percent weight reduction must demonstrate compliance by also operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 at the inlet to the THC control device of the kiln, inline kiln raw mill, or raw materials dryer in the same manner as prescribed in paragraph (i) above. Alternately, you may elect to demonstrate a 98 weight percent reduction in THC across the control device using the performance test requirements in 40 CFR part 63, subpart SS.

(5) The owner or operator of a kiln or in-line kiln/raw mill subject to the 41 µg/dscm mercury standard shall demonstrate compliance using EPA Method 29 of 40 CFR part 60. ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), is an acceptable alternative to EPA Method 29 (portion for mercury only). If the kiln has an in-line raw mill, you must demonstrate compliance with both raw mill off and raw mill on. You must record the hourly recycle rate of CKD during both test conditions and calculate an average hourly rate for the three test runs for each test condition.

(c) Except as provided in paragraph (e) of this section, performance tests required under paragraphs (b)(1) and (b)(2) of this section shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

(d) Performance tests required under paragraph (b)(3) of this section shall be repeated every 30 months.

(e)(1) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable D/F standard under this subpart, the source must conduct a performance test and establish new temperature limit(s) as specified in paragraph (b)(3) of this section.

(2) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable PM standard under §63.1343, the source must conduct a performance test as specified in paragraph (b)(1) of this section.

(3) In preparation for and while conducting a performance test required in paragraph (e)(1) of this section, a source may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in paragraphs (e)(3)(i) through (iv) of this section are met. The source shall submit temperature and other monitoring data that are recorded during the pretest operations.

(i) The source must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph shall include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (e)(1) of this section, including when the planned operational change period would begin.

(ii) The performance test results must be documented in a test report according to paragraph (a) of this section.

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

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

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1350 Monitoring requirements.

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

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

(2) Corrective actions to be taken when required by paragraph (e) of this section;

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

(4) Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

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

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

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

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

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

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

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

(c) The owner or operator of a kiln or in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources including alkali bypasses in accordance with paragraphs (c)(1) through (c)(3) of this section.

(1) Except as provided in paragraph (c)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a kiln or in-line kiln/raw mill subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (c)(1) of this section, monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.

(d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs (d)(1) through (d)(3) of this section.

(1) Except as provided in paragraph (d)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (d)(1) of this section, monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.

(e) The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources in accordance with the procedures of Method 22 of appendix A to part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

(1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs (a)(1) and (a)(2) of this section; and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of appendix A to part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

(f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs (f)(1) through (f)(6) of this section.

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PM control devices.

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

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

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

(3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

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

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

(g) The owner or operator of an affected source subject to an emissions limitation on D/F, THC or mercury emissions that employs carbon injection as an emission control technique shall comply with the monitoring requirements of paragraphs (f)(1) through (f)(6) and (g)(1) through (g)(6) of this section to demonstrate continuous compliance with the D/F, THC or mercury emissions standard.

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

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

(3) The three-hour rolling average activated carbon injection rate shall be calculated as the average of 180 successive one-minute average activated carbon injection rates.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

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

(6) The owner or operator must install, operate, calibrate and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the mercury, THC or D/F performance test in accordance with paragraphs (g)(6)(i) through (g)(6)(iii) of this section.

(i) The owner or operator shall install, calibrate, operate and maintain a device to continuously monitor and record the parameter value.

(ii) The owner or operator must calculate and record three-hour rolling averages of the parameter value.

(iii) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average shall be added to the previous 179 values to calculate the three-hour rolling average.

(h) The owner or operator of an affected source subject to a limitation on THC emissions under this subpart shall comply with the monitoring requirements of paragraphs (h)(1) through (h)(3) of this section to demonstrate continuous compliance with the THC emission standard:

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

(2) The owner or operator is not required to calculate hourly rolling averages in accordance with section 4.9 of Performance Specification 8A if they are only complying with the 50 ppmv THC emissions limit.

(3) For facilities complying with the 50 ppmv THC emissions limit, any thirty-day block average THC concentration in any gas discharged from a greenfield raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a greenfield in-line kiln/raw mill, exceeding 50 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(4) For new facilities complying with the 20 ppmv THC emissions limit, any hourly average THC concentration in any gas discharged from a raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a kiln or in-line kiln/raw mill, exceeding 20 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.

(j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.

(k) The owner or operator of an affected source subject to a particulate matter standard under §63.1343 shall install, calibrate, maintain, and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. All requirements relating to installation, calibration, maintenance, operation or performance of the PM CEMS and implementation of the PM CEMS requirement are deferred pending further rulemaking.

(l) An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (l)(1) through (l)(6) of this section.

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

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

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

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

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

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

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

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

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

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

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

(m) The requirements under paragraph (e) of this section to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the owner or operator chooses to install a COM in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter. To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the owner or operator chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, the requirements in paragraphs (m)(1) through (9) of this section apply to each BLDS:

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

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

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

(4) The presence of an alarm condition should be clearly apparent to facility operating personnel.

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

(6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997).

(7) The baseline output of the system must be established as follows:

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

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

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in §63.2 certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

(9) The owner or operator must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The owner or operator must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

(n) Any kiln or kiln/in-line raw mill using a control device (other than ACI) to comply with a mercury emissions limit or equipment standard will monitor the control device parameters as specified in 40 CFR part 63 subpart SS.

(o) For kilns and in-line kilns/raw mills complying with the requirements in Section 63.1344(g), each owner or operator must obtain a certification from the supplier for each shipment of fly ash received to demonstrate that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control. The certification shall include the name of the supplier and a signed statement from the supplier confirming that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of emission control.

(p) If the facility opts to use a fly ash derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control and demonstrate that the use of this fly ash does not increase mercury emissions, they must obtain daily fly ash samples, composites monthly, and analyze the samples for mercury.

[64 FR 31925, June 14, 1999, as amended at 64 FR 53070, Sept. 30, 1999; 67 FR 16620, Apr. 5, 2002; 67 FR 44769, July 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1351 Compliance dates.

(a) Except as noted in paragraph (c) below, the compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is June 14, 2002.

(b) Except as noted in paragraph (d) below, the compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998, is June 14, 1999, or upon startup of operations, whichever is later.

(c) The compliance date for an existing source to meet the requirements of GCP for THC is December 20, 2007.

(d) The compliance date for a new source which commenced construction after December 2, 2005, and before December 20, 2006 to meet the THC emission limit of 20 ppmv/98 percent reduction or the mercury standard of 41 µg/dscm or a site-specific standard based on application of a wet scrubber will be December 21, 2009.

[71 FR 76552, Dec. 20, 2006]

§ 63.1352 Additional test methods.

(a) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Method 320 or Method 321 of appendix A of this part.

(b) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Methods 26 or 26A of appendix A to part 60 of this chapter, except that the results of these tests shall not be used to establish status as an area source.

(c) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at portland cement manufacturing facilities, for use in applicability

determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:

(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by §§63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).

(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by §63.9(h).

§ 63.1354 Reporting requirements.

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred

during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);

(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and

(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).

(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).

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

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

§ 63.1355 Recordkeeping requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the amount of CKD recycled on an hourly basis.

(f) You must keep records of all fly ash supplier certifications as required by §63.1350(o).

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006]

Other

§ 63.1356 Exemption from new source performance standards.

(a) Except as provided in paragraphs (a)(1) and (2) of this section, any affected source subject to the provisions of this subpart is exempt from any otherwise applicable new source performance standard contained in subpart F or subpart OOO of part 60 of this chapter.

(1) Kilns and in-line kiln/raw mills, as applicable, under 40 CFR 60.60(b), located at area sources are subject to PM and opacity limits and associated reporting and recordkeeping, under 40 CFR part 60, subpart F.

(2) Greenfield raw material dryers, as applicable under 40 CFR 60.60(b), located at area sources, are subject to opacity limits and associated reporting and recordkeeping under 40 CFR part 60, subpart F.

(b) The requirements of subpart Y of part 60 of this chapter, "Standards of Performance for Coal Preparation Plants," do not apply to conveying system transfer points used to convey coal from the mill to the kiln that are associated with coal preparation at a portland cement plant that is a major source under this subpart.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006]

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

(a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any particulate matter and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and in-line kiln/raw mills.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.

(b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results, including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002]

§ 63.1358 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

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

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

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

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§ 63.1359 [Reserved]

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

Citation	Requirement	Applies to Subpart LLL	Explanation
63.1(a)(1)–(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved]
63.1(a)(6)–(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)–(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)–(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)–(5)	Extensions, Notifications	Yes	
63.1(d)		No	[Reserved]
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)–(c)	Units and Abbreviations	Yes	
63.4(a)(1)–(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
63.4(b)–(c)	Circumvention, Severability	Yes	
63.5(a)(1)–(2)	Construction/Reconstruction	Yes	
63.5(b)(1)	Compliance Dates	Yes	
63.5(b)(2)		No	[Reserved]
63.5(b)(3)–(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]
63.5(d)(1)–(4)	Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.5(f)(1)–(2)	Approval of Construction/Reconstruction	Yes	
63.6(a)	Compliance for Standards and Maintenance	Yes	
63.6(b)(1)–(5)	Compliance Dates	Yes	
63.6(b)(6)		No	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)–(2)	Compliance Dates	Yes	
63.6(c)(3)–(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)–(2)	Operation & Maintenance	Yes	
63.6(e)(3)	Startup, Shutdown Malfunction Plan	Yes	
63.6(f)(1)–(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)–(3)	Alternative Standard	Yes	
63.6(h)(1)–(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]
63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)–(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)–(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)–(3)	Performance Testing Requirements	Yes	§63.1349 has specific requirements.
63.7(b)	Notification	Yes	
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)(1)–(4)	Conduct of Tests	Yes	
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	
63.7(h)	Waiver of Tests	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.8(a)(1)	Monitoring Requirements	Yes	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)–(3)	Conduct of Monitoring	Yes	
63.8(c)(1)–(8)	CMS Operation/Maintenance	Yes	Performance specification supersedes requirements for THC CEMS Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes	
63.8(e)	Performance Evaluation for CMS	Yes	Performance specification supersedes requirements for THC CEMS.
63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)–(5)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of Performance Test	Yes	
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/opacity test under §63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)–(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)–(6)	Notification of Compliance Status	Yes	
63.9(i)	Adjustment of Deadlines	Yes	
63.9(j)	Change in Previous Information	Yes	
63.10(a)	Recordkeeping/Reporting	Yes	
63.10(b)	General Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(2)–(4)		No	[Reserved]
63.10(c)(5)–(8)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]

Citation	Requirement	Applies to Subpart LLL	Explanation
63.10(c)(10)–(15)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(d)(1)	General Reporting Requirements	Yes	
63.10(d)(2)	Performance Test Results	Yes	
63.10(d)(3)	Opacity or VE Observations	Yes	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	Yes	
63.10(e)(1)–(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
63.12(a)–(c)	State Authority and Delegations	Yes	
63.13(a)–(c)	State/Regional Addresses	Yes	
63.14(a)–(b)	Incorporation by Reference	Yes	
63.15(a)–(b)	Availability of Information	Yes	

[67 FR 16622, Apr. 5, 2002]

This document was downloaded from the following source on April 24, 2008:

[Subpart LLL--NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE PORTLAND CEMENT MANUFACTURING INDUSTRY](#)

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

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

Source Name:	Essroc Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172-1305
County:	Clark
SIC Code:	3241
Part 70 Operating Permit No.:	T 019-6016-00008
Operation Permit Issuance Date:	June 15, 2004
First TV Renewal No.	T 019-26989-00008
Permit Reviewer:	Aida DeGuzman

On March 31, 2012, the Office of Air Quality (OAQ) had a notice published in the Clark County Evening News, Jeffersonville, Indiana stating that Essroc Cement Corporation applied for its first Part 70 Operating Permit Renewal. The renewal will allow Essroc to continue operating its portland cement manufacturing plant.

The notice also stated that OAQ proposed to issue the renewal and provided information on how the public could review the proposed renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On May 7, 2012, Essroc Cement Corporation made the following comment to the draft Part 70 Operating Permit Renewal. Additions are **bolded** and deletions are ~~struck through~~ for emphasis:

PERMIT COMMENTS

Comment 1:

C.1 (a)

The opacity exceedance level noted here does not match the value included in the original permit and the Technical Source Document, page 49, which is 40% opacity. Please revise this section to reflect the 40% opacity value.

IDEM Response 1:

The 30% opacity limit required in C.1 of the draft permit is a typographical error. This opacity limitation is applicable to sources located in Clark County, Jeffersonville Township. Essroc is in Silver Creek Township, therefore, it is subject to opacity limitation of 40%. Condition C.1 has been revised as follows:

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of ~~thirty percent (30%)~~ **forty percent (40%)** in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

Source Background and Description

Source Name:	Essroc Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172-1305
County:	Clark
SIC Code:	3241
Part 70 Permit Renewal No.:	T 019-26989-00008
Permit Reviewer:	Jenny Acker

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Essroc Cement Corporation relating to the operation of a stationary portland cement manufacturing plant. On September 15, 2008, Essroc Cement Corporation submitted an application to the OAQ requesting to renew its operating permit. Essroc Cement Corporation was issued a Part 70 Operating Permit on June 15, 2004.

Source Definition

This portland cement manufacturing company consists of one (1) plant:

Essroc Cement Corporation, #00008 located at 301 Highway 31, Speed, IN 47172.

IDEM has determined that Hanson Aggregates Midwest Inc. - Aggrock Quarries, #05017 located at 5501 Highway 403, Sellersburg, IN 47172 is not under common control of Essroc Cement Corporation; therefore, they are considered separate sources for the purposes of Part 70 applicability.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

Quarry Activities

- (1) Quarry drilling, identified as EU01, constructed in 1982, with particulate matter (PM) emissions controlled by one (1) baghouse, identified as the drilling rig baghouse 01 and exhausting to stack EP01. Note: The baghouse controlling the quarry drilling has no exhaust to the atmosphere. Dust is collected and then re-deposited into the ground.
- (2) Quarry blasting, identified as EU75, constructed prior to 1945, with associated fugitive particulate matter (PM) emissions.
- (3) Raw material (limestone) loading to trucks, identified as EU76, constructed in 1948, with particulate matter emissions uncontrolled.

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78, constructed in 1948, with emissions uncontrolled.
- (5) Strippings stockpile, identified as EU145, created before 1945.
- (6) Truck unloading to additive hopper or additive storage piles (various sources of Silica/Alumina/Iron), identified as EU99, constructed in 1948, with emissions uncontrolled.
- (7) Various sources of Silica/Alumina/Iron additive storage piles, identified as EU100, created before 1945.
- (8) Additive clay blend pile, identified as EU101, created before 1945.
- (9) Truck unloading to clay storage piles, identified as EU102, constructed in 1948, with emissions uncontrolled.
- (10) Uncovered clay storage pile, identified as EU103, created before 1945.
- (11) Covered clay and ash storage piles, identified as EU104, created before 1945.

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80, with emissions uncontrolled, commenced before 1956.
- (13) Stone surge pile, identified as EU81, created before 1956.
- (14) One (1) primary crusher, identified as EU82, constructed in 1956, with a nominal throughput of 700 tons per hour, with PM emissions uncontrolled.
- (15) One (1) covered conveyor belt for transferring stone from primary crusher to screens, identified as EU83, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
- (16) Screens, identified as EU84, with a nominal throughput of 700 tons per hour, constructed in 1956, with emissions uncontrolled.
- (17) One (1) secondary crusher, identified as EU02, constructed in 1956, with a nominal throughput of 1050 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 200, and exhausting to one (1) stack, identified as EP02.
- (18) Covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass, identified as EU03, constructed in 1956, with a nominal throughput of 1050 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (19) One (1) tertiary crusher, identified as EU04, constructed in 1956, with a nominal throughput of 350 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (20) One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05, constructed in 1956, with emissions controlled by a

- baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (21) One (1) covered conveyor for transferring material from stone ladder and tertiary crusher to traveling belt, identified as EU85, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
 - (22) One (1) traveling belt for transferring material from covered conveyor to North and South stone bins, identified as EU86, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
 - (23) North stone bin, identified as EU06, constructed in 1956, with emissions controlled by a baghouse, identified as baghouse 101, and exhausting to one (1) stack, identified as EP04.
 - (24) South stone bin, identified as EU07, constructed in 1956, with emissions controlled by one (1) baghouse, identified as baghouse 102, and exhausting to one (1) stack, identified as EP05.
 - (25) Stone conveyor transfer to truck, identified as EU87, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
 - (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89, constructed in 1956, with emissions uncontrolled.
 - (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91, constructed in 1956, with emissions uncontrolled.
 - (28) One (1) truck unloading station to truck dump hopper, identified as EU93, constructed in 1956, with emissions uncontrolled.
 - (29) One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94, constructed in 1956, with emissions uncontrolled.
 - (30) Crushed limestone storage piles, identified as EU90, created before 1957.
 - (31) Emergency limestone storage pile, identified as EU95, created during 1957.
 - (32) One (1) truck dump hopper, identified as EU96, constructed in 1977, with emission uncontrolled.
 - (33) One (1) limestone conveyor for transferring limestone from the truck dump hopper to the main limestone storage pile, identified as EU97, constructed in 1977, with a nominal throughput of 700 tons per hour, with emissions uncontrolled.
 - (34) Main limestone storage pile, identified as EU98, created during 1957.

Kiln #1 Cement Kiln Dust (CKD) Operations

- (35) One (1) dust tank system, identified as EU21, constructed in 1971 with a nominal throughput of 100 tons per hour, with emissions controlled by a baghouse, identified as baghouse 210, and exhausting to stack EP17.
- (36) Truck loading from baghouse 221, identified as EU113, with emissions uncontrolled, commenced during July 1971.

- (37) CKD storage pile, identified as EU118, created before 1945.
- (38) CKD sales loadout spout (kiln #1 dust tank), identified as EU155, constructed in 1996, with emissions controlled by a baghouse, with a nominal air flow rate of 2400 actual cubic feet per minute, identified as baghouse 266 (CE98) and exhausting to stack EP98.

Kiln #2 Cement Kiln Dust (CKD) Operations

- (39) Truck loading from the elevator dust tank, identified as EU115, with emissions uncontrolled, commenced during 1977.
- (40) Truck loading from baghouse 16 (alkali bypass system), identified as EU117, with emissions uncontrolled, commenced during 1977.
- (41) One (1) elevator/dust tank (associated with the alkali bypass) for kiln #2, identified as EU28, constructed in 1977, with emissions controlled by baghouse 232 and exhausting to stack EP23.

Miscellaneous Facilities

- (42) Plant Roads, identified as EU152.
- (43) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74, constructed in 1985, with emissions controlled by a baghouse with a nominal air flow rate of 1650 actual cubic feet per minute, identified as baghouse 249, and exhausting to stack EP76.

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945.
- (45) One (1) covered conveyor system for transferring material from the clay hopper to the clay crusher, identified as EU106, constructed before 1954, with a nominal throughput of 75 tons per hour, with emissions uncontrolled.
- (46) One (1) clay crusher, identified as EU08, constructed in 1977, with a nominal throughput of 75 tons per hour, with emissions controlled by a baghouse, identified as baghouse 227, and exhausting to stack EP07.

Finish Operations Crane Storage Facilities

- (47) Emergency BP stone storage pile, identified as EU128, created before 1945.
- (48) One (1) truck unloading station to Emergency BP stone storage pile or Crane storage pile, identified as EU127, with emissions uncontrolled, commenced before 1945.
- (49) One (1) truck unloading station to gypsum storage piles, identified as EU129, with emissions uncontrolled, commenced before 1945.
- (50) Crane storage building, including gypsum storage bin, stone storage bin, two (2) clinker storage bins, and stone, clinker, and gypsum storage piles, identified as EU131, constructed in 1935.
- (51) Gypsum storage piles, identified as EU130 and EU134, created before 1945.

Fossil Fuel Storage and Handling Facilities

- (52) Coal trucks unloading to the coal storage piles and reserve coal storage piles, identified as EU136, constructed in June 1971, with emissions uncontrolled.
- (53) Reserve coal storage piles, identified as EU137, created in May 1971.
- (54) Coal storage piles, identified as EU142, constructed prior to 1945.
- (55) One (1) coal draw-up covered conveying system for transferring material from the coal/alternate energy storage pile to the coal transfer tower, identified as EU63, constructed in June 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 206, and exhausting to stack EP77.
- (56) Coal transfer tower, identified as EU64, constructed in June 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 207, and exhausting to stack EP78.
- (57) One (1) coal bin, identified as EU65, constructed in June 1972, with emissions controlled by one (1) baghouse, identified as baghouse 208, and exhausting to stack EP79.

Kiln #1 Clinker Handling Facilities

- (58) One (1) #1 clinker drag conveyor for transferring clinker from clinker cooler #1 to the apron conveyor, identified as EU23, constructed in May 1971, with a nominal throughput of 100 tons per hour, with emissions controlled by a baghouse, identified as baghouse 217, and exhausting to one (1) stack identified as EP19.
- (59) Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24, constructed in May 1971, with a nominal throughput of 100 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 218, exhausting to one (1) stack identified as EP21.
- (60) Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 31382, exhausting to one (1) stack identified as EPN1.

Kiln #2 Clinker Handling Facilities

- (61) One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157, constructed in 2009, with emissions uncontrolled.
- (62) One (1) #2 clinker drag conveyor for transferring clinker from clinker cooler #2 to the aumond conveyor, identified as EU30, constructed in 1977, with a nominal throughput of 150 tons per hour, with emissions controlled by a baghouse, identified as baghouse 233, and exhausting to one (1) stack identified as EP25.
- (63) One (1) aumond conveyor used for transferring clinker and clinker dust from the #2 clinker drag conveyor, #2 cooler, and baghouse 17 to the clinker can #2 or the cross belt, identified as EU31, constructed in 1977, with a nominal throughput of 150 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 234, exhausting to one (1) stack identified as EP26.
- (64) One (1) cross belt for transferring clinker to the long belt, identified as EU119, constructed in May 1971, with a nominal throughput of 150 tons per hour, with emissions

controlled by a baghouse, identified as baghouse 218, and exhausting to one (1) stack identified as EP21.

- (65) Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120, constructed in 1977, with emissions controlled by one (1) baghouse, identified as baghouse 31382, exhausting to one (1) stack identified as EPN1.

Clinker Handling to Crane Storage Facilities

- (66) One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25, constructed in May 1971, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouse 35925, exhausting to one (1) stack identified as EP27, and baghouse 218, exhausting to one (1) stack identified as EP21.
- (67) One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt, identified as EU32, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35925, and exhausting to one (1) stack identified as EP27.
- (68) One (1) covered incline belt used for transferring clinker from the North clinker transfer tower to the Shuttle Belt then to the North clinker storage building, identified as EU33, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35931, and exhausting to one (1) stack identified as EPN7.
- (69) One (1) clinker storage pile, identified as EU121, created before 1960.
- (70) North clinker storage pile, identified as EU122, created in May 1971.
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7.
- (72) One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44), identified as EU34, constructed in 1962, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35927, and exhausting to one (1) stack identified as EP29.
- (73) One (1) South reclaim clinker covered conveyor used to transfer clinker from the North reclaim clinker covered conveyor system to the crane storage building, identified as EU124, constructed in May 1971, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouse 202, exhausting to one (1) stack identified as EP39 and baghouse 31499, exhausting to one (1) stack identified as EPN2.
- (74) Truck loading station, used for loading material from the North clinker storage pile and clinker storage pile, identified as EU125, constructed in May 1971, with emissions uncontrolled.
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126, constructed in May 1971, with emissions uncontrolled.

2ABC Finish Mill Facilities

- (76) One (1) Base tank (CKD), identified as EU146, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 143, and exhausting to one (1) stack identified as EP84.
- (77) One (1) gypsum/stone/clinker transfer circuit ABC mills, including material transfers and scales, identified as EU35, constructed in 1964, with a nominal throughput of 200 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 131, 31495, and 31496, and exhausting to three (3) stacks identified as EP30, EPN3, and EPN4, respectively.
- (78) Two (2) clinker elevators, identified as EU37, constructed in 1969, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 133, and exhausting to one (1) stack identified as EP33.
- (79) One (1) 2BC finish mill feed belt, identified as EU132, constructed in 1977, with a nominal throughput of 200 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 135 and 137, exhausting to two (2) stacks identified as EP35 and EP37, respectively.
- (80) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38, constructed in 1948, with a nominal throughput of 24 tons per hour, with emissions controlled by a baghouse, identified as baghouse 133, and exhausting to one (1) stack identified as EP33.
- (81) One (1) finish mill circuit 2A, which includes three (3) elevators, finish mill, separator, and air transport system, collectively identified as EU39, constructed in 1948, with a nominal throughput of 24 tons per hour, with emissions controlled by a baghouse, identified as baghouse 134, and exhausting to one (1) stack identified as EP34.
- (82) One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU40, constructed in 1953, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse 135, and exhausting to one (1) stack identified as EP35.
- (83) One (1) finish mill circuit 2C, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU42, constructed in 1960, with a nominal throughput of 36 tons per hour, with emissions controlled by a baghouse, identified as baghouse 137, and exhausting to one (1) stack identified as EP37.
- (84) One (1) separator circuit, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2C, identified as EU43, constructed in 1960 and 1964, respectively, with a nominal throughput of 36 tons per hour, with emissions controlled by a baghouse, identified as baghouse 138, and exhausting to one (1) stack identified as EP37.
- (85) One (1) separator, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2B, identified as EU41, constructed in 1953 and 1955, respectively, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse 136, and exhausting to one (1) stack identified as EP35.
- (86) One (1) BP tank for storing finished product (cement), identified as EU48, constructed in 1965, with a nominal throughput of 700 tons per hour, with emissions controlled by a

baghouse, identified as baghouse 144, and exhausting to one (1) stack identified as EP81.

- (87) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49, constructed in 1966, with a nominal throughput of 50 tons per hour, with emissions controlled by a baghouse, identified as baghouse 146, and exhausting to one (1) stack identified as EP82.

2D Finish Mill Facilities

- (88) One (1) gypsum elevator used to transfer material from the gypsum storage piles to the 2D finish mill circuit, identified as EU135, constructed in 1964, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 120, and exhausting to one (1) stack identified as EP40.
- (89) One (1) 2D finish mill clinker bin transfer, which includes the elevator, conveyor belts, and air transport system, identified as EU44, constructed in 1964, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 120, and exhausting to stack identified as EP40.
- (90) One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouse 36643, exhausting to one (1) stack identified as EPN11, baghouse 31497 exhausting to one (1) stack identified as EPN5, and baghouse 31498 exhausting to one (1) stack identified as EPN6.
- (91) One (1) 2D finish mill roll press circuit, which includes a roller press (crusher) with surge bin, identified as EU46, constructed in 1999, with a nominal throughput of 140 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 261, DC35990, and DC35997, and exhausting to three (3) stacks identified as EP93, EPN8, and EPN9, respectively.
- (92) One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and a cement cooler, identified as EU47, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 139 and 36643, exhausting to two (2) stacks identified as EP41 and EPN11, respectively.

Finish Product 501-Silos Storage and Packing Facilities

- (93) 501-Silos 25-44, identified as EU54, constructed in 1965, with emissions controlled by five (5) baghouses, identified as baghouses 224, 225, 246, 150, and 151, and exhausting to five (5) stacks identified as EP63 through EP67, respectively.
- (94) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 224 and 225, and exhausting to two (2) stacks identified as EP102 and EP68.
- (95) One (1) BIC packer for loading cement into bags, identified as EU56, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by two (2) baghouses, identified as baghouses 224 and 225, and exhausting to two (2) stacks identified as EP102 and EP68.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- (96) 506-Silos 56-73, identified as EU53, constructed in 1958, with emissions controlled by fourteen (14) baghouses, identified as baghouses 159 through 172, and exhausting to fourteen (14) stacks identified as EP49 through EP62, respectively.
- (97) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58, constructed in 1954, each with a nominal throughput of 200 tons per hour, with emissions controlled by baghouses 176 and 177, respectively, and exhausting to stacks EP69 and EP70 respectively.
- (98) One (1) north packer #1 for loading cement into bags, identified as EU59, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 173, and exhausting to one (1) stack identified as EP71.
- (99) One (1) center packer #2 for loading cement into bags, identified as EU60, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 174, and exhausting to one (1) stack identified as EP72.
- (100) One (1) south packer #3 for loading cement into bags, identified as EU61, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 175, and exhausting to one (1) stack identified as EP73.
- (101) One (1) bag compression station, identified as EU62, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 242, and exhausting to one (1) stack identified as EP74.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- (102) 504-Silos 45-48, and 50-55, identified as EU51, constructed in 1959, with emissions controlled by four (4) baghouses, identified as baghouses 153 through 156, and exhausting to four (4) stacks identified as EP44 through EP47, respectively.
- (103) One (1) bulk loading station for trucks and railroad cars, identified as EU52, constructed in 1959, with a nominal throughput of 200 tons per hour, with emissions controlled by baghouse 152, and exhausting to stack EP48.
- (104) 504 Silos Bank/Silo 49 (CKD sales), identified as EU153, constructed in 1959, with emissions controlled by a baghouse, identified as baghouse 264 and exhausting to stack EP96.
- (105) CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154, constructed in 1999, with emissions controlled by a baghouse, identified as baghouse 265 and exhausting to stack EP97.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- (106) 502-Silos 1, 2, and 7-11, identified as EU50, constructed in 1966, with emissions controlled by two (2) baghouses, identified as baghouses 148 and 149, and exhausting to two (2) stacks, identified as EP42 and EP43, respectively.

Raw Mill Facilities

- (107) Two (2) pneumatic truck unloading stations, identified as EU107 and EU108, constructed in July 1976, to fly ash tanks (EU10 and EU11), with emissions controlled by two (2) baghouses, identified as baghouse 228 and baghouse 35363, and exhausting to stacks EP09 and EPN12, respectively.
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled.
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled.
- (110) Two (2) silos for flyash, identified as EU10 and EU11, with emissions controlled by two (2) baghouses, identified as baghouse 228 exhausting to stack EP09, and baghouse 35363 exhausting to stack EPN12.
- (111) One (1) silo for iron ore, identified as EU12, equipped with one (1) elevator, constructed in 1977, with emissions controlled by one (1) baghouse, baghouse 35363 (west flyash tank baghouse) and exhausting to stack EPN12.
- (112) One (1) C-15 covered conveyor system for transferring material from the clay breaker, bottom ash hopper, iron ore tank, fly ash tanks, raw material pile, and the main limestone storage pile to the Loesche raw mill, identified as EU09, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouses 227 (clay crusher), 35134 (C-15 east flyash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively.
- (113) One (1) Loesche raw mill, identified as EU14, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 15, and exhausting to stack S-15.
- (114) One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed to the feed and blend silos, identified as EU15, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 247 and exhausting to stack EP-11.
- (115) One (1) raw material pile, identified as EU112.
- (116) One (1) oil-fired furnace, referred to as the Todd Furnace, used for Loesche mill heating, identified as EU13, constructed in 1977, with a nominal heat input capacity of 55 million British thermal units per hour, with emissions controlled by one (1) baghouse, identified as baghouse 15, and exhausting to stack S-15.
- (117) Feed silo #1 for kiln feed, identified as EU16, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 211, and exhausting to stack EP12.
- (118) Blend silo #2 for blending kiln feed, identified as EU17, constructed in 1977, with emissions controlled by one (1) baghouse, identified as baghouse 230, and exhausting to stack EP13.
- (119) One (1) calibration system, identified as EU18, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 212, and exhausting to stack EP14.

Coal Handling, Milling and Storage Facilities

- (120) Coal (crusher) mill #1, identified as EU66 servicing kiln #1, constructed in May 1971, with a nominal throughput of 12.5 tons per hour, with emissions routed to kiln #1 and controlled by baghouse 221 and exhausting to one (1) stack, identified as S-14.
- (121) Coal (crusher) mill #2, identified as EU67 servicing kiln #2, constructed in 1977, with a nominal throughput of 14 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 252, and exhausting to stack EP88. Note: For the purposes of NSPS Subpart Y applicability, this is also a thermal dryer.
- (122) One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68, constructed in May 1971, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #1 coal mill then routed to kiln #1 and controlled by one (1) baghouse, identified as baghouse 221 and exhausting to stack S-14.
- (123) One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69, constructed in 1977, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #2 coal mill controlled by one (1) baghouse identified as baghouse 252, exhausting to stack EP88. Note: For the purposes of NSPS Subpart Y applicability, this is also part of a thermal dryer.
- (124) Kiln #2 pulverized coal silo, identified as EU149, constructed in 1996, with emissions controlled by one (1) baghouse with a nominal air flow rate of 200 actual cubic feet per minute, identified as baghouse 253 and exhausting to one (1) stack identified as EP101.
- (125) Kiln #2 coal weigh system, identified as EU150, constructed in 1996, with a nominal throughput of 20 tons per hour, with emissions controlled by one filter, identified as filter 254 and exhausting to a vent.
- (126) Kiln #2 burner pump system, identified as EU151, constructed in 1996, with a nominal throughput of 20 tons per hour, with emissions controlled by one filter, identified as filter 255 and exhausting to a vent.

The Kiln #1 and Kiln #2 Facilities

- (127) One (1) feed system for kiln #1, identified as EU19, constructed in May 1971, with a nominal throughput of 105 tons per hour, with PM emissions from the alleviator controlled by one (1) baghouse, identified as baghouse 209 and exhausting to stack EP15 and with PM emissions from the scales and pump controlled by one (1) baghouse, identified as baghouse 212 and exhausting to stack EP14.
- (128) One (1) long dry process rotary cement kiln #1, identified as EU20, constructed in May 1971, with a nominal heat input capacity of 184 million Btu per hour, with a nominal production rate of 60 tons per hour (as clinker), with PM emissions controlled by one (1) baghouse, identified as baghouse 221, and exhausting to one (1) stack, identified as S-14.
- (129) One (1) feed system for kiln #2, identified as EU26, constructed in 1977, with a nominal throughput of 175 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 231, and exhausting to stack EP80.
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27, constructed in 1977, with a nominal heat input

capacity of 302 million Btu per hour, with a nominal production rate of 105 tons per hour (as clinker), with PM emissions controlled by two (2) baghouses, identified as baghouse 15 and baghouse 16 (alkali bypass system), and exhausting to stacks S-15 and S-16, respectively.

The Clinker Cooler #1 Facilities

- (131) One (1) grate clinker cooler #1, identified as EU22, constructed in May 1971, with a nominal throughput rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 222, and exhausting to one (1) stack, identified as S-13.

The Clinker Cooler #2 Facilities

- (132) One (1) grate clinker cooler #2, identified as EU29, constructed in 1977, with a nominal throughput of 105 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 17, and exhausting to one (1) stack, identified as S-17.

Insignificant Activities

The source also consists of the following insignificant activities:

- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (A) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (3) A petroleum fuel other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) The following VOC and HAP storage containers:
 - (A) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (5) Refractory storage not requiring air pollution control equipment.
- (6) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (7) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (8) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8]
- (9) Closed loop heating and cooling systems.
- (10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1%.

- (11) Water runoff ponds for petroleum coke-cutting and coke storage piles.
- (12) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (13) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (14) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (15) Heat exchanger cleaning and repair.
- (16) Paved and unpaved roads and parking lots with public access.
- (17) Underground conveyors. [326 IAC 6.5-1-2]
- (18) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.5-1-2]
- (19) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (20) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
- (21) Emergency generators as follows:
 - (A) Diesel generators not exceeding 1600 horsepower.
- (22) Purge double block and bleed valves.
- (23) A laboratory as defined in 326 IAC 2-7-1(21)(H).
- (24) Other categories with emissions below insignificant thresholds as follows:
 - (A) Storage tank #9 for storing #2 fuel oil, with a capacity of 20,000 gallons;
 - (B) Degreasing operations;
 - (C) Airalon storage tanks;
 - (D) Hydrophobe storage tank;
 - (E) Grinding aid storage tanks;
 - (F) Dust suppressant storage tank; and
 - (G) Additive storage tanks.

Additional Emission Units

- (a) Essroc Cement Corporation has requested the following emission unit be added to the permit for information purposes only.

One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156, installed in 2012, with emissions controlled by one (1) baghouse, identified as baghouse 225, and exhausting to one (1) stack, identified as EP64. [326 IAC 6.5-1-2] [40 CFR 63, Subpart LLL]

- (b) Permit Level Determination - Part 70

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

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Increase in PTE Before Controls of the Modification	
Pollutant	Potential To Emit (ton/yr)
PM	4.62
PM ₁₀	1.91
PM _{2.5}	1.91
SO ₂	0
VOC	0
CO	0
NO _x	0
Single HAPs	neg.
Total HAPs	< 25

The bag flattener qualifies as an exempt unit under 326 IAC 2-1.1-3(e)(1)(A) for a modification to an existing source that has the potential to emit less than five (5) tons per year of either particulate matter (PM) or particulate matter with an aerodynamic diameter less than ten (10) micrometers (PM10).

Existing Approvals

Since the issuance of the Part 70 Operating Permit No. 019-6016-00008 on June 15, 2004, the source has constructed or has been operating under the following approvals as well:

- (a) Administrative Amendment No. 019-25019-00008, issued on September 9, 2007.
 (b) Administrative Amendment No. 019-26369-00008, issued on April 15, 2008.

- (c) Significant Permit Modification No. 019-21450-00008, issued on May 8, 2008.
- (d) Exemption No. 019-28623-00008, issued on November 30, 2009.
- (e) Administrative Amendment No. 019-28737-00008, issued on January 7, 2010.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Clark County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Clark County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Nonattainment effective April 2, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Clark County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Clark County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for PM_{2.5} emissions. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment

New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
 Clark County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO_x, and Pb (lead). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a portland cement plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	Greater than 100
PM ₁₀	Greater than 100
PM _{2.5}	Greater than 100
SO ₂	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO _x	Greater than 100
GHG as CO ₂ e	Greater than 100,000

Pollutant	tons/year
Single HAP	Greater than 10
Combined HAPS	Greater than 25

The Permittee has agreed that this source is major for Part 70 Permits under 326 IAC 2-7, Prevention of Significant Deterioration (PSD) under 326 IAC 2-2 for PM, PM₁₀, SO₂, VOC, CO, NO_x, and GHG as CO₂e, Nonattainment New Source Review under 326 IAC 2-1.1-5 for PM_{2.5}, and Hazardous Air Pollutants under 326 IAC 20. No calculations of unrestricted Potential to Emit have been done.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM₁₀, PM_{2.5}, SO₂, VOC, CO, and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHG is equal to or greater than one hundred thousand (100,000) tons of CO₂ equivalent (CO₂e) emissions per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-

1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

- (d) Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are counted toward the determination of Part 70 applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM ₁₀	1,013
PM _{2.5}	not reported
SO ₂	3,134
VOC	60
CO	2,367
NO _x	2,088
Pb (lead)	0.24

Part 70 Permit Conditions

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

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

Potential to Emit After Issuance

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

Pollutant	tons/year
PM	greater than 100
PM ₁₀	geater than 100
PM _{2.5}	greater than 100
SO ₂	greater than 100
VOC	greater than 100
CO	greater than 100
NO _x	greater than 100
GHG	greater than 100,000 of CO ₂ e

HAP's	Potential Emissions after controls (tons/year)
Arsenic compounds	less than 10
Benzene	less than 10
Beryllium compounds	less than 10
Biphenyl	less than 10
Bis(2-ethylhexyl)phthalate	less than 10
Bromomethane	less than 10
Cadmium compounds	less than 10
Carbon disulfide	less than 10
Chlorobenzene	less than 10
Chloromethane	less than 10
Chromium compounds	less than 10
Di-n-butylphthalate	less than 10
Ethylbenzene	less than 10
Formaldehyde	less than 10
Hydrogen chloride	greater than 10
Lead compounds	less than 10
Manganese compounds	less than 10
Methyl ethyl ketone	less than 10
Methylene chloride	less than 10
Mercury compounds	less than 10
Naphthalene	less than 10
Phenol	less than 10
Selenium compounds	less than 10
Styrene	less than 10
Toluene	less than 10
Total PCDF	less than 10
Total TCDF	less than 10
Xylenes	less than 10
TOTAL	greater than 25

Note The emissions for HAPs were determined through use of AP-42 emission factors. The emission factors are

based on controlled emissions. Potential emissions may be greater than those stated above.

These emissions are based upon the Technical Support Document (TSD) for Part 70 Operating Permit T019-6016-00008.

- (a) This existing stationary source is major for PSD because the emissions of at least one criteria pollutant are greater than one hundred (>100) tons per year, emissions of GHGs are equal to or greater than one hundred thousand (>100,000) tons of CO₂ equivalent (CO₂e) emissions per year, and it is in one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is major for Nonattainment NSR because the emissions of the nonattainment pollutant, PM_{2.5}, and the precursor SO₂, are greater than one hundred (>100) tons per year.
- (c) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

CAM

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the Part 70 Major Source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following tables are used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

PM/PM₁₀ - CAM Applicability

Table 1 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU01	1	326 IAC 6.5-1-2	< 100	< 100	100	N	N
EU13	15	326 IAC 6.5-1-2	< 100	< 100	100	N	N
EU59	173	326 IAC 6-3-2	< 100	< 100	100	N	N
EU60	174	326 IAC 6-3-2	< 100	< 100	100	N	N
EU61	175	326 IAC 6-3-2	< 100	< 100	100	N	N

Table 1 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU64	207	326 IAC 6.5-1-2	< 100	< 100	100	N	N
EU65	208	326 IAC 6.5-1-2	< 100	< 100	100	N	N
EU74	249	326 IAC 2-2 326 IAC 6-3-2	> 100	< 100	100	Y	N

Table 1 - PM/PM₁₀ CAM Applicability

- (1) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to the following emission units for PM, since the uncontrolled potential to emit PM from each unit is less than the major source threshold.
 - Quarry drilling, identified as EU01, with particulate matter (PM) emissions controlled by one (1) baghouse, identified as the drilling rig baghouse 01.
 - One (1) oil-fired furnace, referred to as the Todd Furnace, identified as EU13, with emissions controlled by one (1) baghouse, identified as baghouse 15.
 - One (1) north packer #1 for loading cement into bags, identified as EU59, with emissions controlled by a baghouse, identified as baghouse 173.
 - One (1) center packer #2 for loading cement into bags, identified as EU60, with emissions controlled by a baghouse, identified as baghouse 174.
 - Coal transfer tower, identified as EU64, with emissions controlled by a baghouse, identified as baghouse 207.
 - One (1) coal bin, identified as EU65, with emissions controlled by a baghouse, identified as baghouse 208.
 - One (1) south packer #3 for loading cement into bags, identified as EU61, with emissions controlled by a baghouse, identified as baghouse 175.

- (2) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to emissions unit EU74 for PM upon issuance of this Part 70 Operating Permit Renewal No. 019-26989-00008. The requirements of CAM are applicable because the unit has uncontrolled potential to emit above the major source thresholds for PM, is subject to emission limits for PM [326 IAC 2-2 and 326 IAC 6-3-2], and uses a control device to comply with the emissions limit. Since the controlled PM emissions do not exceed the major source threshold, this unit is not considered a large unit. The existing Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

- (3) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to any emissions units listed in Table 1 for PM₁₀, since there are no emission limitations established for PM₁₀ for these units.

PM/PM₁₀ - CAM Applicability

Table 2 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU02	200	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU03	201	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU04	201	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU05	201	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU06	101	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU07	102	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU08	227	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU09	227, 35134, 35137	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU12	35363	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU15	247	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU16	211	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU17	230	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU18	212	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU19	209	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU21	210	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU23	217	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU24	218	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU25	218, 35925	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU26	231	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU30	233	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU31	234	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU32	35925	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU33	35931	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU34	35927	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU35	131, 31495, 31496	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU37	133	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU38	133	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU39	134	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU40	135	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU41	136	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU42	137	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU43	138	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU44	120	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU47	139, 36643	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU48	144	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU49	146	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU50	148, 149	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU51	153 - 156	326 IAC 6-3-2	> 100	< 100	100	Y	N

Table 2 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU52	152	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU53	159 - 172	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU54	150, 151, 224, 225, 246	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU55	224, 225	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU56	224, 225	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU57	176	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU58	177	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU62	242	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU63	206	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU66	221	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU68	221	326 IAC 6.5-2-4	> 100	< 100	100	Y	N
EU114	31382	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU119	218	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU120	31382	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU123	35931	326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU124	202, 31499	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU132	135, 137	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU135	120	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU146	143	326 IAC 6-3-2	> 100	< 100	100	Y	N
EU153	264	326 IAC 6-3-2	> 100	< 100	100	Y	N

Table 2 - PM/PM₁₀ CAM Applicability

- (1) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to these emissions units for PM upon issuance of this Part 70 Operating Permit Renewal No. 019-26989-00008. The requirements of CAM are applicable because the units each have an uncontrolled potential to emit above the major source thresholds for PM, are subject to an emissions limit for PM [326 IAC 6-3-2 or 326 IAC 6.5-1-2], and use a control device to comply with the emission limits. These units are not considered large units since the controlled PM emissions do not exceed the major source threshold. The existing Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.
- (2) Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any emissions units listed in Table 2 for PM₁₀, since there are no emission limitations established for PM₁₀ for these units.

Table 3 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU10	228, 35363	326 IAC 2-2 / 326 IAC 6-3-2	>100	< 100	100	Y	N
EU11	228, 35363	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	<100	100	Y	N
EU45	31497 / 31498 / 36643	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU46	261, DC35990 / DC35997	326 IAC 2-2 / 326 IAC 6-3-2	> 100	< 100	100	Y	N
EU107	228, 35363	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU108	228, 35363	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU149	253	326 IAC 2-2 / 326 IAC 6-3-2	> 100	< 100	100	Y	N
EU150	254	326 IAC 2-2 / 326 IAC 6-3-2	> 100	< 100	100	Y	N
EU151	255	326 IAC 2-2 / 326 IAC 6-3-2	> 100	< 100	100	Y	N
EU154	265	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	< 100	100	Y	N
EU155	266	326 IAC 2-2 / 326 IAC 6.5-1-2	> 100	< 100	100	Y	N

Table 3 - PM/PM₁₀ CAM Applicability

- (1) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to these emissions units for PM and PM₁₀ upon issuance of this Part 70 Operating Permit Renewal No. 019-26989-00008. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM and PM₁₀, are subject to an emissions limit for PM [326 IAC 2-2, and 326 IAC 6-3-2 or 326 IAC 6.5-1-2] and PM₁₀ [326 IAC 2-2], and use a control device to comply with the emissions limits. These units are not considered large units since the controlled PM emissions do not exceed the major source threshold. The existing Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

Table 4 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU20	221	326 IAC 6.5-2-4 / 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	N
EU28	232	326 IAC 6-3-2 / 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	N
EU67	252	326 IAC 6-3-2 / 40 CFR 60, Subpart Y	> 100	< 100	100	Y	N
EU69	252	326 IAC 6.5-2-4 / 40 CFR 60, Subpart Y	> 100	< 100	100	Y	N

Table 3 - PM/PM₁₀ CAM Applicability

- (1) Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to these emissions units for PM upon issuance of this Part 70 Operating Permit Renewal No. 019-26989-00008. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM, are subject to an emissions limit for PM [326 IAC 6-3-2 or 326 IAC 6.5-2-4], and use a control device to comply with the emissions limit. These units are not considered large units since the controlled PM emissions do not exceed the major source threshold. The existing Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.
- (2) Kiln #1 (EU20) and the elevator/dust tank (associated with the alkali bypass) for Kiln #2 (EU28) are subject to emission limits for PM₁₀ [40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry)]. However, pursuant to 40 CFR 64.2(b)(1)(i), the requirements of CAM shall not apply to emission limitations or standards required by a NESHAP proposed after November 15, 1990. Therefore, the requirements of CAM do not apply to these units (EU20 and EU28) for the PM₁₀ emission limitations established under 40 CFR 63, Subpart LLL with a proposed date of June 14, 1999.
- (3) Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to coal mill #2 (EU67) and the fuel oil-fired preheater (EU69) for coal mill #2 for PM. The requirements of CAM are applicable because the units each have an uncontrolled potential to emit above the major source thresholds for PM, are subject to emissions limits for PM [326 IAC 6-3-2 or 326 IAC 6.5-2-4, and 40 CFR 60, Subpart Y (New Source Performance Standard (NSPS) for Coal Preparation Plants)], and use a control device to comply with the emissions limit. The monitoring requirements of 40 CFR 60, Subpart Y are as follows:
 - (A) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows: (1) A monitoring device for the measurement of the temperature of the gas

stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ± 1.7 °C (± 3 °F).

- (B) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

Since the controlled PM emissions do not exceed the major source threshold, this unit is not considered a large unit. It has been determined that compliance with the monitoring requirements of 40 CFR 60, Subpart Y, in conjunction with the existing Part 70 Compliance Monitoring Requirements, shall satisfy the CAM requirements for PM. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements for PM.

Table 4 - PM/PM₁₀ CAM Applicability							
Emission Unit ID	Control Device ID (BH unless specified otherwise)	Emission Limitation (Y/N)	Uncontrolled PTE (tpy)	Controlled PTE (tpy)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU14	15	326 IAC 6-3-2 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	Y
EU27	15, 16	326 IAC 6.5-2-4 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	Y
EU22	222	326 IAC 6.5-2-4 / 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	Y
EU29	17	326 IAC 6.5-2-4 / 40 CFR 63, Subpart LLL	> 100	< 100	100	Y	Y

Table 4 - PM/PM₁₀ CAM Applicability

- (1) On February 20, 2009, stack testing was conducted at the kiln #2 (EU27) stack S-15 with the Loesche mill (EU14) operating and at the alkaline bypass stack S-16 with the Loesche mill (EU14) operating. The results of these tests show the controlled PTE for kiln #2 from stacks S-15 and S-16 combined to be equivalent to 11.59 tons of PM per year.
- (2) On April 30, 2009 and May 1, 2009, stack testing was conducted at the clinker cooler # 1 (EU22) stack S-13. The results of these tests show the controlled PTE for clinker cooler #1 stack S-13 to be equivalent to 7.33 tons per PM per year.
- (3) On February 17, 2009, stack testing was conducted at the clinker cooler #2 (EU29) stack S-17. The results of these tests show the controlled PTE for clinker cooler #2 from stack S-17 to be equivalent to 10.64 tons of PM per year.
- (4) Based on the above evaluations, the requirements of 40 CFR Part 64, CAM, are applicable to these emissions units (EU14, EU27, EU22 and EU29) for PM upon issuance of this Part 70 Operating Permit Renewal No. 019-26989-00008. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM, are subject to an emissions limit for PM [326 IAC 6-3-2 or 326 IAC 6.5-2-4], and use a control

device to comply with the emissions limit. These units are not considered large units since the controlled PM emissions do not exceed the major source threshold. The existing Part 70 Compliance Monitoring Requirements shall satisfy the CAM requirements. See the Compliance Monitoring Section of this TSD for the detailed CAM requirements.

- (5) These units (EU14, EU22, EU27, and EU29) are subject to an emissions limit for PM₁₀ [40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry)]. However, pursuant to 40 CFR 64.2(b)(1)(i), the requirements of CAM shall not apply to emission limitations or standards required by a NESHAP proposed after November 15, 1990. Therefore, the requirements of CAM do not apply to these units for the PM₁₀ emission limitations established under 40 CFR 63, Subpart LLL with a proposed date of June 14, 1999.

(b) Opacity - CAM Applicability

Numerous emission units are subject to a standard for opacity [40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry)], use a baghouse to comply with the standard, and have a potential to emit before controls equal to or greater than the Part 70 Major Source threshold for the pollutant involved (particulate emissions). However, pursuant to 40 CFR 64.2(b)(1)(i), the requirements of CAM shall not apply to emission limitations or standards required by a NESHAP proposed after November 15, 1990. Therefore, the requirements of CAM do not apply to these units for the opacity limitations established under 40 CFR 63, Subpart LLL with a proposed date of June 14, 1999.

NSPS

40 CFR 60, Subpart F

- (a) Pursuant to 40 CFR 60.60, affected facilities include kilns, coolers, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, and bagging and bulk loading and unloading systems constructed or modified after the applicability date of August 17, 1971. Therefore, the following are considered affected facilities under the New Source Performance Standard (NSPS) for Portland Cement Plants.

Raw Mill Facilities

- (1) two (2) silos for flyash (EU10 and EU11) - 1977
- (2) one (1) silo for iron ore (EU12) - 1977
- (3) C-15 covered conveyor system (EU09) - 1977 (transfer points only)
- (4) Loesche raw mill (EU14) - 1977
- (4) sidewinder (pneumatic transfer pump) (EU15) - 1977
- (6) fuel oil-fired furnace, referred to as the Todd Furnace, used for Loesche Mill heating (EU13) - 1977
- (7) blend silo #2 (EU17) - 1977
- (8) two pneumatic truck unloading stations to fly ash tanks (EU107 and EU108) - July 1976
- (9) iron ore hopper (EU109), equipped with one (1) elevator - July 1976

Kiln #2 Clinker Handling facilities as follows:

- (1) #2 clinker drag conveyor (EU30) - 1977 (transfer points only)
- (2) almond conveyor (EU31) - 1977 (transfer points only)
- (3) clinker can #2 (EU120) - 1977

Clinker Handling to Crane storage facilities as follows:

- (1) North clinker transfer tower (EU32) - 1972 (transfer points only)
- (2) covered incline belt (EU33) - 1972 (transfer points only)

Kiln and Clinker Cooler facilities as follows:

- (1) kiln #2 (EU27) and associated preheater unit, alkali bypass (EU28), and kiln #2 feed system (EU26) - 1977
- (2) clinker cooler #2 (EU29) - 1977

2ABC Finish Mill Facilities as follows:

- (1) finish mill feed belt (EU132) - 1977 (transfer points only)

2D Finish Mill Facilities as follows:

- (1) 2D finish mill roll press circuit with surge bin (EU46) - 1999

Miscellaneous Facilities as follows:

- (1) warehouse conveyor system (EU74) - 1985

Finish Product 501-Silos Storage and Packing Facilities as follows:

- (1) BIC mixer for mixing lime and pigment with cement (EU55) - 1973
- (2) BIC packer for loading cement into bags (EU56) - 1973

- (b) Pursuant to 40 CFR 60.62(d), for an affected source subject to this subpart (40 CFR 60, Subpart F) with a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, you must comply with the most stringent emission limit or requirement and are not subject to the less stringent requirement.

The affected sources are subject to the following requirements:

Requirement	40 CFR 60, Subpart F	40 CFR 63, Subpart LLL
<i>kiln #2 (EU27)</i>		
PM	0.30 lb per ton feed (dry basis)	0.30 lb per ton feed
Opacity	not to exceed 20%	not to exceed 20%
<i>clinker cooler #2 (EU29)</i>		
PM	0.10 lb per ton feed (dry basis)	0.10 lb per ton feed
Opacity	not to exceed 10%	not to exceed 10%
<i>remaining affected facilities</i>		
Opacity	not to exceed 10%	not to exceed 10%

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

- (c) The CKD operations are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.60, Subpart F) because they are not affected facilities under the rule.
- (d) The rest of the affected facilities at ESSROC were not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.60, Subpart F) because they were constructed prior to the applicability date of August 17, 1971.

40 CFR 60, Subpart OOO

None of the facilities at Essroc are subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO) because either they were constructed prior the applicability date of August 31, 1983 or they are not affected facilities.

40 CFR 60, Subpart Dc

Essroc has three (3) fuel oil-fired furnaces, including the Todd furnace (EU13), the fuel oil-fired air heater for preheating kiln #1 (EU68), and the fuel oil-fired air preheater for kiln #2 (EU69). These three furnaces are not subject to the requirements of the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc) because they were constructed prior to June 9, 1989, which is the applicability date of the rule. Additionally, both of the air heaters have maximum heat input capacities less than 10 million British thermal units per hour.

40 CFR 60, Subparts K and Ka

Essroc has five number 2 fuel oil storage tanks and one gasoline storage tank, with capacities ranging from 150 to 20,000 gallons. These storage tanks are not subject to the New Source Performance Standard (NSPS) for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 (40 CFR 60, Subpart K) or for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR 60, Subpart Ka) because the storage tanks have capacities less than 40,000 gallons.

40 CFR 60, Subpart Kb

- (a) ESSROC has three lubricating oil storage tanks, with capacities ranging from 250 to 500 gallons. These storage tanks are not subject to the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60, Subpart Kb) because the tanks have capacities less than 10,500 gallons.
- (b) ESSROC also has three grinding aid storage tanks locating in the finishing room area, with capacities of 11,500 gallons, 15,000 gallons, and 15,000 gallons. These storage tanks are not subject to the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60, Subpart Kb) because the vapor pressure is less than 15.0 kPa.

40 CFR 60, Subpart UUU

None of the facilities at this source are subject to the requirements of the New Source Performance Standard (NSPS) for Calciners and Dryers in Mineral Industries (40 CFR 60, Subpart UUU) because the source does not fit the definition of a mineral processing plant.

40 CFR 60.250 Subpart Y (Standards of Performance for Coal Preparation Plants)

- (a) The coal processing facilities at this source meet the definition of a coal preparation plant because they do pulverize coal. This rule establishes particulate emission limitations for the coal processing (coal mills) and conveying equipment, coal storage systems, and coal transfer and loading systems that have commenced construction or modification after October 24, 1974. The following affected facilities at Essroc are subject to the requirements of the New Source Performance Standard (NSPS) for Coal Preparation Plants (40 CFR 60, Subpart Y), which is incorporated by reference as 326 IAC 12-1, because they were constructed after the applicability date of October 24, 1974:
- (1) Coal (crusher) mill #2 (EU67) - 1977; Note: for the purposes of Subpart Y applicability, this unit meets the definition of a thermal dryer.
 - (2) Fuel-oil fired air preheater for kiln #2 coal mill (EU69) - 1977.

Nonapplicable portions of the NSPS will not be included in the permit. These facilities are subject to the following portions of 40 CFR 60, Subpart Y.

- (1) 40 CFR 60.250 (a) and (b)
- (2) 40 CFR 60.251
- (3) 40 CFR 252 (a), (a)(1), and (a)(2)
- (4) 40 CFR 60.255 (a)
- (5) 40 CFR 60.256 (a), (a)(1)(i), and (a)(2)
- (6) 40 CFR 60.257 (a), (b)(1), (b)(2), (b)(3), (b)(4), and (b)(5)
- (7) 40 CFR 60.258 (b)(2), (b)(3), (c), and (d)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Y

- (b) The coal processing facilities at this source meet the definition of a coal preparation plant because they do pulverize coal. This rule establishes particulate emission limitations for the coal processing (coal mills) and conveying equipment, coal storage systems, and coal transfer and loading systems that have commenced construction or modification after October 24, 1974. The following affected facilities at Essroc are subject to the requirements of the New Source Performance Standard (NSPS) for Coal Preparation Plants (40 CFR 60, Subpart Y), which is incorporated by reference as 326 IAC 12-1, because they were constructed after the applicability date of October 24, 1974:

- (1) kiln #2 pulverized coal silo (EU149) - 1996;
- (2) Kiln #2 coal weigh system (EU150) - 1996; and
- (3) Kiln #2 burner pump system (EU151) - 1996.

However, pursuant to 40 CFR 63.1356 - Sources with Multiple Emission Limits or Monitoring Requirements: if an affected facility subject to this subpart (40 CFR 63, Subpart LLL) has a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter (Chapter I), the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.

The affected sources are subject to the following requirements:

Requirement	40 CFR 60, Subpart Y	40 CFR 63, Subpart LLL
<i>EU149, EU150, EU151</i>		
Opacity	not to exceed 20%	not to exceed 10%

Since the limitations in 40 CFR 63, Subpart LLL are the most stringent, these facilities (EU149, EU150, and EU151) are subject to the applicable requirements of 40 CFR 63, Subpart LLL and are exempted by 40 CFR 63.1356 from the requirements of 40 CFR 60, Subpart Y.

- (c) The following facilities are coal processing facilities at ESSROC but are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Y) because they were constructed prior to the applicability date of October 24, 1974:

- (1) coal (crusher) mill #1 (EU66) - May 1971;
- (2) fuel oil-fired air preheater for kiln #1 (EU68) - May 1971;
- (3) coal trucks unloading to reserve coal storage pile (EU136) - June 1971;
- (4) reserve coal storage pile (EU137) - pre-1945;
- (5) coal storage pile (EU142) - pre-1945;
- (6) coal draw-up covered conveyor (EU63) - June 1972;
- (7) coal transfer tower (EU64) - June 1972; and

- (8) coal bin (EU65) - June 1972.

Regardless of the dates of construction, the coal (crusher) mill #1 (EU66) and the fuel oil-fired air preheater for kiln #1 (EU68) would not be subject to the requirements of the NSPS Subpart Y because the emissions from these units exhaust to kiln #1 instead of directly to the atmosphere.

40 CFR 63, Subpart T

The parts washers at this source are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Degreasers (40 CFR 63, Subpart T) because they do not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.

40 CFR 63, Subpart LLL

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

- (a) Pursuant to 40 CFR 63.1351(c) [76 FR 2832, Jan. 18, 2011], the compliance date for existing sources for all the requirements that became effective on November 8, 2010 is September 9, 2013. Therefore, until September 9, 2013, the source shall comply with the rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006).
- (1) The following is an analysis of the applicability of the requirements of the NESHAP.
- (A) Each kiln, except for kilns that burn hazardous waste and are subject to and regulated under 40 CFR 63, Subpart EEE, is considered an affected source.
 - (B) Each clinker cooler, raw mill, finish mill, and raw material dryer is considered an affected source.
 - (C) Each bagging and bulk loading and unloading system is considered an affected source.
 - (D) Each raw material, clinker, or finished product storage bin, is considered an affected source.

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

- (E) Each conveying system transfer point, including those associated with coal preparation used to convey coal from the mill to the kiln, is considered an affected source.
- (F) Pursuant to 40 CFR 63.1340(c), for portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill. Therefore, the following facilities are not considered affected sources under the NESHAP.

Quarry Activities

- Quarry drilling, identified as EU01.
- Quarry blasting, identified as EU75.
- Raw material (limestone) loading to trucks, identified as EU76.

Raw Material Stockpile Operations

- Raw material (clay overburden) unloading to strippings stockpile, identified as EU78.
- Truck unloading to additive hopper or additive storage pile (Silica/Alumina/Iron), identified as EU99.
- Truck unloading to clay storage piles, identified as EU102.

Raw Material Sizing Operations

- Raw material unloading to stone surge pile or primary crusher, identified as EU80.
- One (1) primary crusher, identified as EU82.
- One (1) covered conveyor belt for transferring stone from primary crusher to screens, identified as EU83.
- Screens, identified as EU84.
- One (1) secondary crusher, identified as EU02.
- Covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass, identified as EU03.
- One (1) tertiary crusher, identified as EU04.
- One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05.
- One (1) covered conveyor for transferring material from stone ladder and tertiary crusher to traveling belt, identified as EU85.
- One (1) traveling belt for transferring material from covered conveyor to North and South stone bins, identified as EU86.
- North stone bin, identified as EU06.
- South stone bin, identified as EU07.
- Stone conveyor transfer to truck, identified as EU87.
- One (1) truck unloading station to crushed limestone storage pile, identified as EU89
- One (1) truck loading station from crushed limestone storage pile, identified as EU91.

- One (1) truck unloading station to truck dump hopper, identified as EU93.
- One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94.
- One (1) truck dump hopper, identified as EU96.
- One (1) limestone conveyor for transferring limestone from the truck dump hopper to the main limestone storage pile, identified as EU97.

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

Raw Material Stockpile Operations

- Strippings stockpile, identified as EU145.
- Silica/Alumina/Iron additive storage pile, identified as EU100.
- Additive clay blend pile, identified as EU101.
- Uncovered clay storage pile, identified as EU103.
- Covered clay and bottom ash storage piles, identified as EU104.

Raw Material Sizing Operations

- Stone surge pile, identified as EU81.
- Crushed limestone storage piles, identified as EU90.
- Emergency limestone storage pile, identified as EU95.
- Main limestone storage pile, identified as EU98.

Finish Operations Crane Storage Facilities

- Emergency BP stone storage pile, identified as EU128.
- Gypsum storage piles, identified as EU130 and EU134.

Fossil Fuel Storage and Handling Facilities

- One (1) reserve coal storage pile, identified as EU137.
- One (1) coal storage pile, identified as EU142.

Clinker Handling to Crane Storage Facilities

- One (1) clinker storage pile, identified as EU121.
- North clinker storage pile, identified as EU122.

Raw Mill Facilities

- One (1) raw material pile, identified as EU112.

(H) Cement kiln dust (CKD) is not considered a raw material or finished product. Therefore, the following facilities are not considered affected sources under the NESHAP.

Kiln #1 Cement Kiln Dust (CKD) Operations

- One (1) dust tank system, identified as EU21.
- Truck loading from baghouse 221, identified as EU113.
- CKD storage pile, identified as EU118.
- CKD sales loadout spout (kiln #1 dust tank), identified as EU155.
- One (1) elevator/dust tank (associated with the alkali bypass) for kiln #2, identified as EU28

Kiln #2 Cement Kiln Dust (CKD) Operations

- Truck loading from the elevator dust tank, identified as EU115.
- Truck loading from baghouse 16 (alkali bypass system), identified as EU117.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- 504 Silos Bank/Silo 49 (CKD sales), identified as EU153.
- CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154.

- (2) The following facilities are subject to rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006).

Miscellaneous Facilities

- One (1) warehouse conveyor system for conveying bagged cement, identified as EU74. (transfer points only)

Clay Processing Operations

- Clay hopper, identified as EU105.
- One (1) covered conveyor system for transferring material from storage piles to the clay crusher, identified as EU106.
- One (1) clay crusher, identified as EU08.

Finish Operations Crane Storage Facilities

- One (1) truck unloading station to Emergency BP stone storage pile or Crane storage pile, identified as EU127.
- One (1) truck unloading station to gypsum storage piles, identified as EU129.
- Crane storage building, including gypsum storage bin, stone storage bin, two (2) clinker storage bins, and stone, clinker, and gypsum storage piles, identified as EU131.

Fossil Fuel Storage and Handling Facilities

- Coal trucks unloading to the reserve coal storage pile, identified as EU136.
- One (1) coal draw-up covered conveying system for transferring material from the coal/alternate energy storage pile to the coal transfer tower, identified as EU63. (transfer points only)
- Coal transfer tower, identified as EU64. (transfer points only)
- One (1) coal bin, identified as EU65.

Kiln #1 Clinker Handling Facilities

- One (1) #1 clinker drag conveyor for transferring clinker from clinker cooler #1 to the apron conveyor, identified as EU23.
- Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24.
- Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114.

Kiln #2 Clinker Handling Facilities

- One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157.
- One (1) #2 clinker drag conveyor for transferring clinker from clinker cooler #2 to the aumond conveyor, identified as EU30. (transfer points only)
- One (1) aumond conveyor used for transferring clinker from the #2 clinker drag conveyor to the clinker can #2 or the cross belt, identified as EU31. (transfer points only)
- One (1) cross belt for transferring clinker to the long belt, identified as EU119.
- Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120.

Clinker Handling to Crane Storage Facilities

- One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25.
- One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt, identified as EU32. (transfer points only)
- One (1) covered incline belt used for transferring clinker from the North clinker transfer tower to the Shuttle Belt then to the North clinker storage building, identified as EU33. (transfer points only)
- North clinker storage building, identified as EU123.
- One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44), identified as EU34.
- One (1) South reclaim clinker covered conveyor used to transfer clinker from the North reclaim clinker covered conveyor system to the crane storage building, identified as EU124.
- Truck loading station, used for loading material from the North clinker storage pile and clinker storage pile, identified as EU125.
- Truck unloading station, used for loading material to the crane storage building, identified as EU126.

2ABC Finish Mill Facilities

- One (1) Base tank, identified as EU146.
- One (1) gypsum/stone/clinker transfer circuit ABC mills, including material transfers and scales, identified as EU35.
- Two (2) clinker elevators, identified as EU37.
- One (1) 2BC finish mill feed belt, identified as EU132. (transfer points only)
- 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- One (1) finish mill circuit 2A, which includes three (3) elevators, finish mill, separator, and air transport system, collectively identified as EU39.
- One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU40.
- One (1) finish mill circuit 2C, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU42.
- One (1) separator circuit, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2C, identified as EU43.
- One (1) separator, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2B, identified as EU41.
- One (1) BP tank for storing finished product (cement), identified as EU48.

- One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.

2D Finish Mill Facilities

- One (1) gypsum elevator used to transfer material from the gypsum storage piles to the 2D finish mill circuit, identified as EU135.
- One (1) 2D finish mill clinker bin transfer, which includes the elevator, conveyor belts, and air transport system, identified as EU44.
- One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45.
- One (1) 2D finish mill roll press circuit, which includes a roller press (crusher) with surge bin, identified as EU46.
- One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and a cement cooler, identified as EU47.

Finish Product 501-Silos Storage and Packing Facilities

- 501-Silos 25-44, identified as EU54.
- One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- One (1) BIC packer for loading cement into bags, identified as EU56.
- One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- 506-Silos 56-73, identified as EU53.
- Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.
- One (1) north packer #1 for loading cement into bags, identified as EU59.
- One (1) center packer #2 for loading cement into bags, identified as EU60.
- One (1) south packer #3 for loading cement into bags, identified as EU61.
- One (1) bag compression station, identified as EU62.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- 504-Silos 45-48, and 50-55, identified as EU51.
- One (1) bulk loading station for trucks and railroad cars, identified as EU52.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- 502-Silos 1, 2, and 7-11, identified as EU50.

Raw Mill Facilities

- Two (2) pneumatic truck unloading stations, identified as EU107 and EU108.
- One (1) iron ore hopper, identified as EU109.
- One (1) bottom ash hopper, identified as EU158.
- Two (2) silos for flyash, identified as EU10 and EU11.
- One (1) silo for iron ore, identified as EU12.
- One (1) C-15 covered conveyor system for transferring material from the clay breaker, bottom ash hopper, iron ore tank, fly ash tanks, raw material pile, and the main limestone storage pile to the triple gate, identified as EU09. (transfer points only)
- One (1) Loesche raw mill, identified as EU14.
- One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed to the feed and blend silos, identified as EU15.
- One (1) oil-fired furnace, referred to as the Todd Furnace, used for Loesche mill heating, identified as EU13.

- Blend silo #1 for blending kiln feed, identified as EU16.
- Blend silo #2 for blending kiln feed, identified as EU17.
- One (1) calibration system, identified as EU18.

Coal Handling, Milling and Storage Facilities

- One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68.
- One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69.
- Kiln #2 pulverized coal silo, identified as EU149.
- Kiln #2 coal weigh system, identified as EU150.
- Kiln #2 burner pump system, identified as EU151.

The Kiln #1 and Kiln #2 Facilities

- One (1) feed system for kiln #1, identified as EU19.
- One (1) long dry process rotary cement kiln #1, identified as EU20.
- One (1) feed system for kiln #2, identified as EU26.
- One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27.

The Clinker Cooler #1 Facilities

- One (1) grate clinker cooler #1, identified as EU22.

The Clinker Cooler #2 Facilities

- One (1) grate clinker cooler #2, identified as EU29.

- (3) Until September 9, 2013, the above facilities in paragraph (a)(2) are subject to the rule requirements, *that were in effect or became effective December 20, 2006*, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006).

- 40 CFR 63.1340
- 40 CFR 63.1341
- 40 CFR 63.1342
- 40 CFR 63.1343 (a) and (b),
- 40 CFR 63.1344 (a), (b), (f) and (g)
- 40 CFR 63.1345
- 40 CFR 63.1347
- 40 CFR 63.1348
- 40 CFR 63.1349 (a), (b)(1) and (b)(2),
- 40 CFR 63.1349 (b)(3)(i), (ii), (iii) and (iv)
- 40 CFR 63.1349(b)(4)(i)
- 40 CFR 63.1349 (c), (d) and (e)
- 40 CFR 63.1350 (a), (b), (c)(1), (d)(1) and (3), (e) and (f)
- 40 CFR 63.1350 (h)(1) and (4), (i), (j), (k) (l), (n), (o), and (p)
- 40 CFR 63.1352
- 40 CFR 63.1354
- 40 CFR 63.1355
- 40 CFR 63.1356
- 40 CFR 63.1357
- 40 CFR 63.1358

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

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

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

- (1) As a result of the amendments published in 75 FR 54970, on September 9, 2010, and in 76 FR 2832, on January 18, 2011, the following changes have been made to the affected source determinations made under the NESHAP.

- (A) Pursuant to 40 CFR 63.1340(b)(9) [75 FR 55051, Sept. 9, 2010], each open clinker pile is considered an affected source under the NESHAP. Therefore, on and after September 9, 2013, the following facilities are considered affected sources under 40 CFR, Subpart LLL.

Clinker Handling to Crane Storage

- One (1) clinker storage pile, identified as EU121.
- North clinker storage pile, identified as EU122.

- (B) Pursuant to 40 CFR 63.1340(c) [75 FR 55051, Sept. 9, 2010], crushers are not affected sources under the NESHAP, regardless of the location. Therefore, on and after September 9, 2013, the following facilities are not considered affected sources under 40 CFR 63, Subpart LLL.

Clay Processing Operations

- One (1) clay crusher, identified as EU08.

- (2) The remainder of the applicability determination remains unchanged. Therefore, on and after September 9, 2013, the following facilities are subject to the requirements, of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011).

Miscellaneous Facilities

- One (1) warehouse conveyor system for conveying bagged cement, identified as EU74. (transfer points only)

Clay Processing Operations

- Clay hopper, identified as EU105.
- One (1) covered conveyor system for transferring material from storage piles to the clay crusher, identified as EU106.

Finish Operations Crane Storage Facilities

- One (1) truck unloading station to Emergency BP stone storage pile or Crane storage pile, identified as EU127.
- One (1) truck unloading station to gypsum storage piles, identified as EU129.
- Crane storage building, including gypsum storage bin, stone storage bin, two (2) clinker storage bins, and stone, clinker, and gypsum storage piles, identified as EU131.

Fossil Fuel Storage and Handling Facilities

- Coal trucks unloading to the reserve coal storage pile, identified as EU136.
- One (1) coal draw-up covered conveying system for transferring material from the coal/alternate energy storage pile to the coal transfer tower, identified as EU63. (transfer points only)
- Coal transfer tower, identified as EU64. (transfer points only)
- One (1) coal bin, identified as EU65.

Kiln #1 Clinker Handling Facilities

- One (1) #1 clinker drag conveyor for transferring clinker from clinker cooler #1 to the apron conveyor, identified as EU23.
- Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24.
- Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114.

Kiln #2 Clinker Handling Facilities

- One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157.
- One (1) #2 clinker drag conveyor for transferring clinker from clinker cooler #2 to the aumond conveyor, identified as EU30. (transfer points only)
- One (1) aumond conveyor used for transferring clinker from the #2 clinker drag conveyor to the clinker can #2 or the cross belt, identified as EU31. (transfer points only)
- One (1) cross belt for transferring clinker to the long belt, identified as EU119.
- Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120.

Clinker Handling to Crane Storage Facilities

- One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25.
- One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt, identified as EU32. (transfer points only)
- One (1) covered incline belt used for transferring clinker from the North clinker transfer tower to the Shuttle Belt then to the North clinker storage building, identified as EU33. (transfer points only)
- One (1) clinker storage pile, identified as EU121.
- North clinker storage pile, identified as EU122.
- North clinker storage building, identified as EU123.
- One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44), identified as EU34.

- One (1) South reclaim clinker covered conveyor used to transfer clinker from the North reclaim clinker covered conveyor system to the crane storage building, identified as EU124.
- Truck loading station, used for loading material from the North clinker storage pile and clinker storage pile, identified as EU125.
- Truck unloading station, used for loading material to the crane storage building, identified as EU126.

2ABC Finish Mill Facilities

- One (1) Base tank, identified as EU146.
- One (1) gypsum/stone/clinker transfer circuit ABC mills, including material transfers and scales, identified as EU35.
- Two (2) clinker elevators, identified as EU37.
- One (1) 2BC finish mill feed belt, identified as EU132. (transfer points only)
- 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- One (1) finish mill circuit 2A, which includes three (3) elevators, finish mill, separator, and air transport system, collectively identified as EU39.
- One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU40.
- One (1) finish mill circuit 2C, which includes the feed hopper, feed belt, finish mill, and elevator, collectively identified as EU42.
- One (1) separator circuit, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2C, identified as EU43.
- One (1) separator, which includes an air transport system and pump, used in conjunction with the finish mill circuit 2B, identified as EU41.
- One (1) BP tank for storing finished product (cement), identified as EU48.
- One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.

2D Finish Mill Facilities

- One (1) gypsum elevator used to transfer material from the gypsum storage piles to the 2D finish mill circuit, identified as EU135.
- One (1) 2D finish mill clinker bin transfer, which includes the elevator, conveyor belts, and air transport system, identified as EU44.
- One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45.
- One (1) 2D finish mill roll press circuit, which includes a roller press (crusher) with surge bin, identified as EU46.
- One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and a cement cooler, identified as EU47.

Finish Product 501-Silos Storage and Packing Facilities

- 501-Silos 25-44, identified as EU54.
- One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- One (1) BIC packer for loading cement into bags, identified as EU56.
- One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- 506-Silos 56-73, identified as EU53.
- Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.

- One (1) north packer #1 for loading cement into bags, identified as EU59.
- One (1) center packer #2 for loading cement into bags, identified as EU60.
- One (1) south packer #3 for loading cement into bags, identified as EU61.
- One (1) bag compression station, identified as EU62.

Finish Product 504-Silos Storage and Bulk Loading Facilities

- 504-Silos 45-48, and 50-55, identified as EU51.
- One (1) bulk loading station for trucks and railroad cars, identified as EU52.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- 502-Silos 1, 2, and 7-11, identified as EU50.

Raw Mill Facilities

- Two (2) pneumatic truck unloading stations, identified as EU107 and EU108.
- One (1) iron ore hopper, identified as EU109.
- One (1) bottom ash hopper, identified as EU158.
- Two (2) silos for flyash, identified as EU10 and EU11.
- One (1) silo for iron ore, identified as EU12.
- One (1) C-15 covered conveyor system for transferring material from the clay breaker, bottom ash hopper, iron ore tank, fly ash tanks, raw material pile, and the main limestone storage pile to the triple gate, identified as EU09. (transfer points only)
- One (1) Loesche raw mill, identified as EU14.
- One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed to the feed and blend silos, identified as EU15.
- One (1) oil-fired furnace, referred to as the Todd Furnace, used for Loesche mill heating, identified as EU13.
- Blend silo #1 for blending kiln feed, identified as EU16.
- Blend silo #2 for blending kiln feed, identified as EU17.
- One (1) calibration system, identified as EU18.

Coal Handling, Milling and Storage Facilities

- One (1) fuel oil-fired air preheater for kiln #1 coal mill, identified as EU68.
- One (1) fuel oil-fired air preheater for kiln #2 coal mill, identified as EU69.
- Kiln #2 pulverized coal silo, identified as EU149.
- Kiln #2 coal weigh system, identified as EU150.
- Kiln #2 burner pump system, identified as EU151.

The Kiln #1 and Kiln #2 Facilities

- One (1) feed system for kiln #1, identified as EU19.
- One (1) long dry process rotary cement kiln #1, identified as EU20.
- One (1) feed system for kiln #2, identified as EU26.
- One (1) dry process rotary cement kiln #2 and associated preheater unit, equipped with an alkali bypass, identified as EU27.

The Clinker Cooler #1 Facilities

- One (1) grate clinker cooler #1, identified as EU22.

The Clinker Cooler #2 Facilities

- One (1) grate clinker cooler #2, identified as EU29.

- (3) On and after, September 9, 2013, the affected facilities in paragraph (b)(2) are subject to the rule requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing

Industry (40 CFR 63, Subpart LLL) as published at 64 FR 31925-31962 (June 14, 1999), as amended at 64 FR 53070 (Sept. 30 1999), 67 FR 16619-16624 (April 5, 2002), 67 FR 44769 (July 5, 2002), 67 FR 72584-72585 (Dec. 6, 2002), 68 FR 37358 (June 23, 2003), 71 FR 76549-76552 (Dec. 20, 2006), 75 FR 55051-55066 (Sept. 9, 2010), and 76 FR 2835-2837 (Jan. 18, 2011).

- 40 CFR 63.1340
- 40 CFR 63.1341
- 40 CFR 63.1342
- 40 CFR 63.1343 (a)
- 40 CFR 63.1343 (b)(1) Table 1: Lines 1 - 4, 9 - 10, and 13 - 16.
- 40 CFR 63.1343 (b)(2)
- 40 CFR 63.1343 (c), and (d)
- 40 CFR 63.1343 (e) Table 2: Lines 1, 3, 5, 6, and 8.
- 40 CFR 63.1344
- 40 CFR 63.1345
- 40 CFR 63.1346 (a), (b), and (f)
- 40 CFR 63.1347
- 40 CFR 63.1348 (applicable portions to be determined prior to September 2013)
- 40 CFR 63.1349(a)
- 40 CFR 63.1349(b)(1)
- 40 CFR 63.1349 (b)(2) and (b)(3)
- 40 CFR 63.1350(a)
- 40 CFR 63.13450 (b) and (d)
- 40 CFR 63.13450 (f)(1), (f)(2), and (f)(3)
- 40 CFR 63.1350 (f)(4) and (g)
- 40 CFR 63.1350 (h), (i), and (j)
- 40 CFR 63.1350 (k) and (l)
- 40 CFR 63.1350 (m)
- 40 CFR 63.1350(n)
- 40 CFR 63.1350(o)
- 40 CFR 63.1350(p)
- 40 CFR 63.1351
- 40 CFR 63.1352
- 40 CFR 63.1353
- 40 CFR 63.1354 (a), (b)(1) through (b)(8)
- 40 CFR 63.1354 (9)(i) through (9)(v)
- 40 CFR 63.1354(9)(vi)
- 40 CFR 63.1354(10)
- 40 CFR 63.1354(c)
- 40 CFR 63.1355 (a) through (d)
- 40 CFR 63.1355 (e), (f), and (g)
- 40 CFR 63.1356
- 40 CFR 63.1357
- 40 CFR 63.1358
- 40 CFR 63.1359: Table 1 to Subpart LLL of Part 63 - Applicability of General Provisions (applicable portions)

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

326 IAC 20-28-1 and 40 CFR 63, Subpart EEE (National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustors)

The kilns are not subject to the requirements of 326 IAC 20-28-1 and 40 CFR 63, Subpart EEE, (National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustors), because the kilns do not combust hazardous waste and are not permitted to combust hazardous waste.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 1-5-2 (Emergency Reduction Plans)

The source is subject to 326 IAC 1-5-2.

326 IAC 2-2 (Prevention of Significant Deterioration)

Essroc Cement Corporation was in existence prior to 1971. The source has been a major source under PSD upon promulgation of the Prevention of Significant Deterioration Program. The following determinations regarding PSD applicability were made as part of the Part 70 Operating Permit No. 019-6016-00008 (issued June 15, 2004) permitting action.

The source made the following modifications to the plant in 1982, 1985, 1994, 1996, and 1998/1999.

The following facilities were constructed in 1982	Limited PM Emissions		Limited PM ₁₀ Emissions	
	PM (tons/yr)	PM (lbs/hr)	PM ₁₀ (tons/yr)	PM ₁₀ (lbs/hr)
Quarry Drilling	24.9	5.68	N/A	N/A
Totals	24.9	--	N/A	N/A
PSD Significance Levels	25	--	N/A	N/A

The following facilities were constructed in 1985	Limited PM Emissions		Limited PM ₁₀ Emissions	
	PM (tons/yr)	PM (lbs/hr)	PM ₁₀ (tons/yr)	PM ₁₀ (lbs/hr)
Vacuum System	4.86	1.11	N/A	N/A
Warehouse Conveyor System	20.04	4.58	N/A	N/A
Totals	24.9	--	N/A	N/A
PSD Significance Levels	25	--	N/A	N/A

The following facilities were constructed in 1994	Limited PM Emissions		Limited PM ₁₀ Emissions	
	PM (tons/yr)	PM (lbs/hr)	PM ₁₀ (tons/yr)	PM ₁₀ (lbs/hr)
Elevator transferring from hopper to additive bin	24.9	5.68	14.9	3.40
Totals	25	--	14.9	--
PSD Significance Levels	25	--	14.9	--

The following facilities were constructed in 1996	Limited PM Emissions		Limited PM ₁₀ Emissions	
	PM (tons/yr)	PM (lbs/hr)	PM ₁₀ (tons/yr)	PM ₁₀ (lbs/hr)
Kiln #2 coal handling system	1.186	0.27	0.710	0.16
Kiln #2 coal dust silo	16.007	3.65	9.579	2.19
CKD sales loadout (kiln#1 dust tank)	4.743	1.08	2.838	0.65
Kiln #2 coal weigh system	2.964	0.68	1.774	0.40
Totals	24.90	--	14.90	--
PSD Significance Levels	25	--	15	--

The following facilities were constructed in 1998/1999	Limited PM Emissions		Limited PM ₁₀ Emissions	
	PM (tons/yr)	PM (lbs/hr)	PM ₁₀ (tons/yr)	PM ₁₀ (lbs/hr)
CKD sales loadout spout	5.038	1.15	3.015	0.69
2D finish mill roll press circuit	19.862	4.53	11.885	2.71
Totals	24.90	--	14.90	--
PSD Significance Levels	25	--	15	--

Title I changes

In the case of the 2D finish mill roll press circuit, PSD minor limits have already been established in a previously issued permit. Therefore, these limits were included in the Title V permit. The other emission units did not have enforceable limits included in previous permits sufficient to limit emissions below the PSD significance thresholds. Therefore, emission limits necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable were established through the Title V review process.

- (a) The PM emissions from baghouses 261, DC35990, and DC35997 controlling the 2D finish mill roll press circuit with surge bin (EU46) shall not exceed 5.5 pounds per hour (limit for all three baghouses combined).
- (b) The PM₁₀ emissions from baghouses 261, DC35990, and DC35997 controlling the 2D finish mill roll press circuit with surge bin (EU46) shall not exceed 3.2 pounds per hour (limit for all three baghouses combined).

Note: Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) shall not apply. There is not sufficient information available to determine whether the 2D finish mill roll press circuit with surge bin (EU46) is in compliance with these limits; therefore stack testing will be required to demonstrate compliance.

- (c) The PM₁₀ emissions from the baghouse controlling the CKD sales loadout spout (kiln #1 dust tank) (EU155) shall not exceed 0.65 pounds per hour and the PM emissions shall not exceed 1.08 pounds per hour.
- (d) The number of holes drilled by the quarry drilling process shall not exceed 38,000 per 12 consecutive month period and the PM emissions shall not exceed 1.3 pounds per hole.
- (e) The PM emissions from baghouse 249 controlling the warehouse conveyor system (EU74) shall not exceed 4.58 pounds per hour.
- (f) The PM emissions from baghouse 265 (CE97) controlling the CKD sales loadout spout (EU154) shall not exceed 1.15 pounds per hour.

- (g) The PM₁₀ emissions from baghouse 265 (CE97) controlling the CKD sales loadout spout (EU154) shall not exceed 0.69 pounds per hour.
- (h) The PM emissions from baghouse 255 controlling the kiln #2 burner pump system (EU151) shall not exceed 0.27 pounds per hour.
- (i) The PM₁₀ emissions from baghouse 255 controlling the kiln #2 burner pump system (EU151) shall not exceed 0.16 pounds per hour.
- (j) The PM emissions from baghouse 253 controlling the kiln #2 pulverized coal silo (EU149) shall not exceed 3.65 pounds per hour.
- (k) The PM₁₀ emissions from baghouse 253 controlling the kiln #2 pulverized coal silo (EU149) shall not exceed 2.19 pounds per hour.
- (l) The PM emissions from baghouse 254 controlling the kiln #2 coal weigh system (EU150) shall not exceed 0.68 pounds per hour.
- (m) The PM₁₀ emissions from baghouse 254 controlling the kiln #2 coal weigh system (EU150) shall not exceed 0.41 pounds per hour.
- (n) The PM emissions from baghouse 228 controlling the elevator for transferring material from the hopper to the additive bin shall not exceed 5.68 pounds per hour.
- (o) The PM₁₀ emissions from baghouse 228 controlling the elevator for transferring material from the hopper to the additive bin shall not exceed 3.40 pounds per hour.

**326 IAC 2-2.4 (Actuals Plantwide Applicability Limitations in Attainment Areas) and
326 IAC 2-3.4 (Actuals Plantwide Applicability Limitations in Nonattainment Areas)**

Essroc Cement Corporation was issued Significant Permit Modification No. 019-21485-00008 on May 8, 2008, which incorporated a Plant wide Applicability Limitation (PAL) for NO_x. The PAL permit provisions enables ESSROC to install new equipment, expand existing operations, add new operations, and modify its processes without the changes being subject to Major New Source Review (NSR) requirements in 326 IAC 2-2 and 326 IAC 2-3 as long as ESSROC maintains compliance with the PAL provisions.

326 IAC 2-2.4-7 and 326 IAC 2-3.4-7(Contents of the PAL permit)

- (a) The PAL permit must contain, at a minimum, the following information:
 - (1) The PAL pollutant and the applicable source-wide emission limitation in tons per year.
 - (2) The PAL permit effective date and the expiration date of the PAL.
 - (3) Specification in the PAL permit that if the Permittee applies to renew a PAL before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the department.
 - (4) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions.
 - (5) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of 326 IAC 2-2.4-9 and 326 IAC 2-3.4-9.

- (6) The calculation procedures that the Permittee shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total.
- (7) A requirement that the Permittee monitor all emissions units in accordance with 326 IAC 2-2.4-12 and 326 IAC 2-3.4-12.
- (8) A requirement to retain the records required under 326 IAC 2-2.4-13 and 326 IAC 2-3.4-13 on site. The records may be retained in an electronic format.
- (9) A requirement to submit the reports required under 326 IAC 2-2.4-14 and 326 IAC 2-3.4-14 by the required deadlines.
- (10) Any other requirements that IDEM deems necessary to implement and enforce the PAL.

326 IAC 2-2.4-8 and 326 IAC 2-3.4-8 (PAL effective period and reopening of the PAL permit)
The PAL effective period is ten (10) years.

326 IAC 2-2.4-9 and 326 IAC 2-3.4-9 (Expiration of a PAL)

- (a) If this PAL is not renewed in accordance with the procedures in 326 IAC 2-2.4-10 and 326 IAC 2-3.4-10 it shall expire at the end of the PAL effective period, and the requirements in this section shall apply.
- (b) Each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emission limitation under a revised permit established.
- (c) Until IDEM issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, the Permittee shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change or change in the method of operation at the source will be subject to major NSR requirements if the change meets the definition of major modification in 326 IAC 2-2-1(ee) and 326 IAC 2-3-1(z).
- (e) The Permittee shall continue to comply with any state or federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established under 326 IAC 2-2-8(a)(3) and 326 IAC 2-3-2(d), but were eliminated by the PAL.

326 IAC 2-2.4-10 and 326 IAC 2-3.4-10 (Renewal of a PAL)

The Permittee shall submit a timely application to IDEM to request renewal of a PAL. A timely application is one that is submitted at least six (6) months prior to, but not earlier than eighteen (18) months from the date of PAL expiration. If the Permittee submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

326 IAC 2-2.4-11 and 326 IAC 2-3.4-11 (Increasing a PAL during the PAL Effective Period)

- (a) The department may increase a PAL emission limitation during the PAL effective period only if the major stationary source complies with the following provisions:
 - (1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification.

The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

- (2) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ten (10) years. In this case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
 - (3) The owner or operator shall obtain a major NSR permit for all emissions units identified in subdivision (1) regardless of the magnitude of the emissions increase resulting from them. These emissions units shall comply with any emissions requirements resulting from the major NSR process even though they have also become subject to the PAL or continue to be subject to the PAL.
 - (4) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (b) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT equivalent controls as determined in accordance with subsection (a)(2), plus the sum of the baseline actual emissions of the small emissions units.
 - (c) The PAL permit must be revised to reflect the increased PAL level under the public notice requirements of section 5 of this rule.

326 IAC 2-2.4-12 and 326 IAC 2-3.4-12 (Monitoring requirements for PAL)

- (a) The following general requirements apply:
 - (1) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determine plantwide emissions of the PAL pollutants in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by the system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
 - (2) The PAL monitoring system must employ one (1) or more of the four (4) general monitoring approaches meeting the minimum requirements set forth in subsection (b) and must be approved by the department.
 - (3) Notwithstanding subdivision (2), an alternative monitoring approach may be employed:
 - (A) that meets subdivision (1); and

- (B) if it is approved by the IDEM.
- (4) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
- (b) The followings are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (c) through (i):
 - (1) Mass balance calculations for activities using solvents.
 - (2) CEMS.
 - (3) CPMS or PEMS.
 - (4) Emission factors.
- (c) The Permittee when using mass balance calculations to monitor PAL pollutant emissions from activities using solvents shall meet the following requirements:
 - (1) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit.
 - (2) Assume that the emissions unit emits the entire PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process.
 - (3) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from the material, the Permittee must use the highest value of the range to calculate the PAL pollutant emissions unless the IDEM determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- (d) The Permittee, when using CEMS to monitor PAL pollutant emissions, shall meet the following requirements:
 - (1) CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and
 - (2) CEMS must sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.
- (e) The Permittee when using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
 - (1) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors development.
 - (2) The emissions unit shall operate within the designated range of use for the emission factor if applicable.
 - (3) If technically practicable, the Permittee that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six (6) months of PAL permit issuance unless the IDEM determines that testing is not required.

- (f) The Permittee must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data unless another method for determining emissions during the periods is specified in the PAL permit.
- (g) All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the IDEM. The testing must occur at least once every five (5) years after issuance of the PAL.

326 IAC 2-2.4-13 and 326 IAC 2-3.4-13 (Record keeping requirements)

- (a) The Permittee shall retain a copy of all records necessary to determine compliance with any requirement of this rule and of the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions, for five (5) years from the date of the record.
- (b) The Permittee shall retain a copy of the following records for the duration of the PAL effective period plus five (5) years:
 - (1) A copy of the PAL permit application and any applications for revisions to the PAL.
 - (2) Each annual certification of compliance pursuant to 40 CFR Part 70 and the data relied on in certifying the compliance.

326 IAC 2-2.4-14 and 326 IAC 2-3.4-14 (Reporting and notification requirements)

The Permittee shall submit semiannual monitoring reports and deviation reports to the IDEM in accordance with 326 IAC 2-7.

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

The operation of kiln #1 and kiln #2 will emit greater than 10 tons per year of a single HAP and 25 tons per year of a combination of HAPs, each. However, pursuant to 326 IAC 2-4.1-1(a), 326 IAC 2-4.1 does not apply to an owner or operator that has received all necessary permits for the construction or reconstruction before July 27, 1997. On June 7, 1983, the Permittee received Operation Permit No. 10-03-87-0174 for the operation of kiln #1 and Operation Permit No. 10-03-87-0176 for the operation of kiln #2. Neither kiln was reconstructed after July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 do not apply to kiln #1 or kiln #2.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of PM₁₀ is greater than 250 tons per year, and the potential to emit of CO, NO_x, and SO₂ is greater than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, 2012, and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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

Pursuant to 326 IAC 3-5-1(c)(5), portland cement plants shall monitor the opacity at the following facilities: kilns, clinker coolers. The source shall install, calibrate, and maintain a continuous monitoring system (COMS) for opacity for kiln #1, kiln #2, grate clinker cooler #1, and grate clinker cooler #2.

326 IAC 5-1 (Opacity Limitations)

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

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

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

The following emissions units were previously permitted with PM emissions limitations established under 326 IAC 6-3-2. In a similar situation, Cause No. 02-A-J-2920, the Indiana Office of Environmental Adjudication ruled on May 14, 2004 that IDEM shall apply the previous interpretation of the rule (326 IAC 6-1). Any emissions units permitted subject to 326 IAC 6-3-2 shall remain subject to 326 IAC 6-3-2.

Therefore, the following emissions units are subject to the requirements of 326 IAC 6-3-2:

- (a) One (1) secondary crusher, identified as EU02.
- (b) One (1) tertiary crusher, identified as EU04.
- (c) One (1) elevator/dust tank for kiln #2, identified as EU28.
- (d) North stone bin, identified as EU06.
- (e) South stone bin, identified as EU07.
- (f) One (1) warehouse conveyor system for conveying bagged cement, identified as EU74.
- (g) One (1) clay crusher, identified as EU08.
- (h) One (1) #1 clinker drag conveyor, identified as EU23.
- (i) Apron conveyor, identified as EU24.
- (j) One (1) long belt, identified as EU25.
- (k) One (1) North clinker transfer tower, identified as EU32.
- (l) One (1) North reclaim clinker covered conveyor system, identified as EU34.
- (m) One (1) South reclaim clinker covered conveyor, identified as EU124.
- (n) One (1) Base tank, identified as EU146.
- (o) One (1) gypsum/stone/clinker transfer circuit ABC mills, identified as EU35.
- (p) Two (2) clinker elevators, identified as EU37.
- (q) One (1) 2BC finish mill feed belt, identified as EU132.
- (r) 2A hopper / preliminary ball mill used to grind clinker and gypsum, identified as EU38.
- (s) One (1) finish mill circuit 2A, identified as EU39.
- (t) One (1) finish mill circuit 2B, identified as EU40.
- (u) One (1) finish mill circuit 2C, identified as EU42.
- (v) One (1) separator circuit, which includes an air transport system and pump, identified as EU43.
- (w) One (1) separator, which includes an air transport system and pump, identified as EU41.
- (x) One (1) BP tank for storing finished product (cement), identified as EU48.
- (y) One (1) pump used to transfer finished product (cement) from the BP tank to silos, identified as EU49.
- (z) One (1) gypsum elevator, identified as EU135.
- (aa) One (1) 2D finish mill clinker bin transfer, identified as EU44.
- (bb) One (1) 2D finish mill roll press circuit with surge bin, identified as EU46.
- (cc) One (1) 2D finish mill circuit, identified as EU47.
- (dd) 501-Silos 25-44, identified as EU54.
- (ee) One (1) BIC mixer for mixing lime and pigment with the cement, identified as EU55.
- (ff) One (1) BIC packer for loading cement into bags, identified as EU56.

- (gg) 506-Silos 56-73, identified as EU53.
- (hh) Two (2) bulk loading stations for railroad cars and trucks, identified as EU57 and EU58.
- (ii) One (1) north packer #1 for loading cement into bags, identified as EU59.
- (jj) One (1) center packer #2 for loading cement into bags, identified as EU60.
- (kk) One (1) south packer #3 for loading cement into bags, identified as EU61.
- (ll) One (1) bag compression station, identified as EU62.
- (mm) 504-Silos 45-48, and 50-55, identified as EU51.
- (nn) 504 Silos Bank/Silo 49 (CKD sales), identified as EU153.
- (oo) One (1) bulk loading station for trucks and railroad cars, identified as EU52.
- (pp) 502-Silos 1, 2, and 7-11, identified as EU50.
- (qq) One (1) silo for flyash, identified as EU10.
- (rr) One (1) C-15 covered conveyor system, identified as EU09.
- (ss) One (1) Loesche raw mill, identified as EU14.
- (tt) One (1) sidewinder (pneumatic transfer pump), identified as EU15
- (uu) Blend silo #2 for blending kiln feed, identified as EU17.
- (vv) Coal (crusher) mill #2, identified as EU67.
- (ww) Kiln #2 pulverized coal silo, identified as EU149.
- (xx) Kiln #2 coal weigh system, identified as EU150.
- (yy) Kiln #2 burner pump system, identified as EU151.

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

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

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

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

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

ESSROC is not subject to the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) because even though they are located in Clark County, they are not located in Jeffersonville township.

326 IAC 6.5-1 (Particulate Emission Limitations Except Lake County)

This source is located in Clark County and the actual PM emissions from this source are greater than 10 tons per year. Therefore, facilities not specifically identified in 326 IAC 6.5-2 through 326 IAC 6.5-10, are subject to the requirements of 326 IAC 6.5-1-2.

Emissions units previously permitted with PM emissions limitations established under 326 IAC 6-3-2 shall remain subject the requirements of 326 IAC 6-3-2. Under the previous interpretation of the rule (326 IAC 6-1), these units are not subject to the requirements of 326 IAC 6.5-1-2.

The requirements of 326 IAC 6.5-1-2(a), apply to facilities not limited by 326 IAC 6.5-1-2(b), (e), (f), or (g). Pursuant to 326 IAC 6.5-1-2(g), mineral aggregate operations, where the process is totally enclosed shall comply with 326 IAC 6.5-1-2(a), and 326 IAC 2, 326 IAC 5-1, and 326 IAC 6-4 shall apply in all cases to mineral aggregate operations. Therefore, mineral aggregate operations, which are not totally enclosed, are not subject to the requirements of 326 IAC 6.5-1-2(a), and the following facilities are not subject to the requirements of 326 IAC 6.5-1-2.

- (a) Raw material unloading to stone surge pile or primary crusher, identified as EU80.
- (b) One (1) primary crusher, identified as EU82.
- (c) One (1) covered conveyor belt, identified as EU83.
- (d) Screens, identified as EU84.
- (e) One (1) covered conveyor, identified as EU85.
- (f) One (1) traveling belt, identified as EU86. Stone conveyor transfer to truck, identified as EU87.
- (g) One (1) truck unloading station to truck dump hopper, identified as EU93.
- (h) One (1) truck dump hopper, identified as EU96.
- (i) One (1) limestone conveyor, identified as EU97.
- (j) Truck unloading to additive hopper or additive storage pile (Silica/Alumina/Iron), identified as EU99.
- (a) One (1) truck unloading station, identified as EU127.
- (k) Crane storage building, identified as EU131.
- (l) Clay hopper, identified as EU105.
- (m) One (1) covered conveyor system for transferring material from the clay hopper to the clay crusher, identified as EU106.
- (n) One (1) Kreyling hopper, identified as EU157.
- (o) Truck loading station, identified as EU125.
- (p) One (1) iron ore hopper, identified as EU109.
- (q) One (1) bottom ash hopper, identified as EU158.

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) from each of the following facilities shall not exceed three-hundredths (0.03) grain per dry cubic foot (dscf).

- (b) Quarry drilling, identified as EU01.
- (c) Covered conveyor, identified as EU03.
- (d) One (1) conveyor used to bypass tertiary crusher, identified as EU05.
- (e) One (1) dust tank system, identified as EU21.
- (f) Truck loading from baghouse 221, identified as EU113.
- (g) CKD sales loadout spout (kiln #1 dust tank), identified as EU155.
- (h) Truck loading from the elevator dust tank, identified as EU115.
- (i) One (1) coal draw-up covered conveying system, identified as EU63.
- (j) Coal transfer tower, identified as EU64.
- (k) One (1) coal bin, identified as EU65.
- (l) Clinker can #1, identified as EU114.
- (m) One (1) #2 clinker drag conveyor, identified as EU30.
- (n) One (1) almond conveyor, identified as EU31.

- (o) One (1) cross belt, identified as EU119.
- (p) Clinker can #2, identified as EU120.
- (q) One (1) covered incline belt, identified as EU33.
- (r) North clinker storage building, identified as EU123.
- (s) One (1) 2D finish mill clinker / gypsum feed circuit, identified as EU45.
- (t) CKD sales loadout spout for CKD destined for sale and/or reuse into process, identified as EU154.
- (u) Two (2) pneumatic truck unloading stations to fly ash tanks, identified as EU107 and EU108.
- (v) One (1) silo for flyash, identified as EU11.
- (w) One (1) silo for iron ore, identified as EU12, equipped with one elevator, constructed in 1977.
- (x) One (1) oil-fired furnace, referred to as the Todd Furnace, used for heating the Loesche raw mill, identified as EU13.
- (y) Feed silo #1 for kiln feed, identified as EU16.
- (z) One (1) calibration system, identified as EU18.
- (aa) Coal (crusher) mill #1, identified as EU66.
- (bb) One (1) feed system for kiln #1, identified as EU19.
- (cc) One (1) feed system for kiln #2, identified as EU26.

Insignificant Activities

- (dd) Underground conveyors.
- (ee) Coal bunker and coal scale exhausts and associated dust collector vents.
- (ff) One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156.

326 IAC 6.5-2 (Particulate Emission Limitations Clark County)

Pursuant to 326 IAC 6.5-2-4, Essroc Materials (now Essroc Cement Corporation) shall meet the following emissions limits:

- (a) The combined particulate matter emissions from the kiln #2 system which includes kiln #2 equipped with an alkali bypass (EU27), the fuel oil-fired air preheater for kiln #2 (EU69), and clinker cooler #2 (EU29), shall not exceed 265.20 tons per year and 0.4 pound per ton of kiln feed (dry basis).
- (b) The combined particulate matter emissions from the kiln #1 system, which includes kiln #1 (EU20), the fuel oil-fired air preheater (EU68), and clinker cooler #1 (EU22), shall not exceed 251.20 tons per year and 0.58 pound per ton of kiln feed (dry basis).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

- (a) The kilns are subject to this rule because each kiln has the potential to emit greater than 25 tons per year or 10 pounds per hour of SO₂. The SO₂ emissions from each of the kilns shall not exceed 6.0 pounds per million Btu of heat input when combusting coal or a combination of coal and oil. Compliance shall be demonstrated on a calendar month average.
- (b) The fuel oil-fired furnaces and associated preheaters (EU13, EU68, and EU69) are subject to this rule because each one has the potential to emit greater than 25 tons per year or 10 pounds per hour of SO₂. The SO₂ emissions from each of the furnaces shall not exceed 0.5 pound per million Btu of heat input when combusting distillate fuel oil. Compliance shall be demonstrated on a calendar month average.

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

Pursuant to this rule, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the coal and fuel oil consumptions from each of the kilns (EU20 and EU27) and each of the fuel oil-fired furnaces and preheaters (EU13, EU68, and EU69). Coal sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-2 for coal combustion. Oil sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-4 for oil combustion.

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

The parts washers are subject to the requirements of these rules. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

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

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

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for a cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

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

326 IAC 8-3-8 (Organic Solvent Degreasing Operations: material requirements for cold cleaning degreasers)

The cold cleaning degreasers are subject to the requirements of this rule because the source is located in Clark County and the parts being cleaned are not considered electronic components. Pursuant to 326 IAC 8-3-8 (Organic Solvent Degreasing Operations: material requirements for cold cleaning degreasers), the following conditions shall apply:

- (a) The source shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) The source shall maintain the following records for each purchase:
 - (1) the name and address of the solvent supplier;
 - (2) the date of purchase;
 - (3) the type of solvent;
 - (4) the volume of each unit of solvent;
 - (5) the total volume of the solvent; and
 - (6) the true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit);

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

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

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

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

326 IAC 8-7 (Specific VOC Reduction Requirements)

The requirements of 326 IAC 8-7 (Specific VOC emission reduction requirements for Lake, Porter, Clark, and Floyd Counties) are not applicable to this source, the potential to emit VOC from the source (excluding exempted facilities as listed in the rule) is less than 100 tons per year. A summary of the applicability determination is shown in the following table:

Unit Description	Potential to Emit VOC (tons/year)	Include in Applicability Determination	Notes
volatile storage tanks	10 ^(a)	no	
kiln #1 ^(b)	6.68	yes	exempt per 326 IAC 8-7-2(a)(3)(Q), volatile organic liquid storage facilities
kiln #2 ^(b)	75.5	yes	
combustion sources	2.59	yes	as per 326 IAC 8-7-2(2)(A)
Total for all units included in applicability determination	84.77		

Notes:

- (a) Emissions from the volatile storage tanks were estimated based on a conservative assumption. More accurate emission estimates are not necessary however, since the emissions from the storage tanks do not count toward the applicability determination of this rule.
- (b) Detailed calculations of kiln emissions are shown in Appendix A.

As shown in the table above, the potential VOC emissions from all units included in the applicability determination, are less than 100 tons per year; therefore, the requirements of 326 IAC 8-7 (Specific VOC Reduction Requirements) do not apply.

326 IAC 10-1 (NO_x Control in Clark and Floyd Counties)

This source is subject to the requirements of this rule because it is located in Clark County and has the potential to emit NO_x greater than 100 tons per year. The facilities at the source which are subject to the requirements of this rule are the following:

- The long dry rotary cement kiln #1 (EU20)
- The dry preheater rotary cement kiln #2 (EU27)

Pursuant to this rule the following conditions shall apply:

- (a) NO_x emissions from the long dry rotary cement kiln #1 (EU20) shall not exceed 10.8 pounds per ton of clinker produced on an operating day basis and six (6.0) pounds per ton of clinker produced on a thirty (30) day rolling average.
- (b) NO_x emissions from the dry preheater rotary cement kiln #2 (EU27) shall not exceed 5.9 pounds per ton of clinker produced on an operating day basis and 4.4 pounds per ton clinker produced on a thirty (30) day rolling average basis. During the ozone control

period of each year after May 31, 2004, compliance with the requirements of 326 IAC 10-3 will also satisfy the requirements 326 IAC 10-1 for kiln #2.

- (c) Compliance with these limits shall be demonstrated by installing and operating a NO_x continuous emissions monitor (CEM). The CEM shall be certified according to procedures contained in 326 IAC 3 and 40 CFR 75 as applicable.
- (d) CEM performance evaluation reports shall be submitted each calendar quarter.
- (e) The source shall notify the OAQ at least thirty (30) days prior to the addition or modification of a facility that may result in a potential increase in NO_x emissions.
- (f) The source may comply with the reporting requirements of this rule by submitting to the OAQ a substitute report. A substitute report is a report that satisfies an applicable state or federal reporting requirement and contains the information required to be submitted by this rule.

326 IAC 10-3 (NO_x Emission Limits)

- (a) Pursuant to 326 IAC 10-3, beginning on May 31, 2004, kiln #2 shall be equipped with low-NO_x burners. This rule shall apply to kiln #2 during the ozone control period of each year. The requirements of 326 IAC 10-1 shall apply to kiln #2 at all other times.
- (b) The requirements of 326 IAC 10-3 do not apply to kiln #1 because it is not a long dry kiln as defined in 326 IAC 10-3-2(5) because it is less than 14 feet in diameter. Therefore, the requirements of 326 IAC 10-1 (above) shall apply to kiln #1 at all times.

Testing Requirements

- (a) Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to demonstrate compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 6.5-1-2 (Particulate Matter (PM) Limitations), the Permittee shall perform PM testing on baghouse 266 controlling the CKD sales loadout spout (kiln #1 dust tank) (EU155).
- (b) Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to determine compliance with 326 IAC 6.5-1-2 (Particulate Matter (PM) Limitations), the Permittee shall perform PM testing on baghouse 265 controlling CKD sales loadout spout (EU154).
- (c) Not later than ninety (90) days after the first day of operation after issuance of this permit (Part 70 Operating Permit Renewal No. 019-26989-00008), in order to determine compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall perform PM₁₀ testing on baghouse 265 controlling CKD sales loadout spout (EU154).
- (d) The Permittee shall test kiln #1 (EU20), kiln #2 equipped with alkali bypass (EU27) and associated preheater, clinker cooler #1 (EU22), clinker cooler #2 (EU29), kiln feed system #1 (EU19), and kiln feed system #2 (EU26) for PM emissions in order to demonstrate compliance with 326 IAC 6.5-2-4 (Particulate Matter (PM)) and 326 IAC 6.5-1-2 (Particulate Matter (PM)) at least once every 2.5 years from the date of the most recent valid compliance demonstration.

Testing shall be conducted utilizing methods approved by the Commissioner and shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the

performance testing required by the condition. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

Compliance Determination and Monitoring Requirements

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

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

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

- (a) Kiln #1 (EU20) and kiln #2 (EU27) have applicable Compliance Determination Requirements as follows:

Continuous Monitoring

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) continuous opacity monitoring systems (COMS) for kiln #1 (EU20) and kiln #2 (EU27) shall be calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2. All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3. Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

Pursuant to 326 IAC 10-1-6 (Emissions Monitoring) and 326 IAC 10-3 (Monitoring and Testing Requirements), a continuous emissions monitoring systems (CEMS) for kiln #1 (EU20) and kiln #2 (EU26) shall be installed, calibrated, maintained, and operated for measuring Nitrogen Oxides (NO_x), which meet all applicable performance specifications of 326 IAC 3-5-2. All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3. Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 10-1-6.

SO₂ Emissions

- (1) Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion or simultaneous combustion of coal and oil, do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance with the SO₂ limit shall be determined utilizing one of the following methods:

- (A) Coal sampling and analysis shall be performed using one of the following procedures:
 - (i) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]: The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system; Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period; Minimum sample size shall be five hundred (500) grams; Samples shall be composited and analyzed at the end of each calendar month; Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
 - (ii) Sample and analyze the coal pursuant to 326 IAC 3-7-2(a); or
 - (iii) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or
- (B) 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 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)]
- (C) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the kilns, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (1) or (2) above. [326 IAC 7-2-1(b)]

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

- (2) Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions from combustion of oil, does not exceed five-tenths (0.5) pound per MMBtu. Compliance with the SO₂ limit shall be determined utilizing one of the following options.
 - (A) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (i) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
 - (ii) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19. Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and If a

partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

- (B) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from each of the kilns and heaters, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

- (b) Clinker cooler #1 (EU22) and clinker cooler #2 (EU29) have applicable Compliance Determination Requirements as follows:

Continuous Monitoring

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) continuous opacity monitoring systems (COMS) for clinker cooler #1 (EU22) and clinker cooler #2 (EU29) shall be calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2. All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3. Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

- (c) The fuel oil-fired furnace and preheater (EU28 & EU69), and the Todd furnace (EU13) have applicable Compliance Determination Requirements as follows:

SO₂ Emissions

- (1) Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions from combustion of oil, does not exceed five-tenths (0.5) pound per MMBtu. Compliance with the SO₂ limit shall be determined utilizing one of the following options.
- (A) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
- (i) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
- (ii) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19. Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and if a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (B) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from each of the kilns and heaters, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

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

(a) Baghouses/Dust Collectors

(1) Visible Emissions Notations

Visible emission notations of all baghouses/dust collector stack exhausts, specifically listed in the permit, for which continuous opacity monitors are not used, shall be performed once per day during normal operations. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(2) Parametric Monitoring

The Permittee shall record the pressure drop across all the baghouses/dust collector stack exhausts, specifically listed in the permit, for which continuous opacity monitors are not used, at least once per day when the associated facility/emission units are in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range or the range established during the most recent stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(3) Broken or Failed Bag Detection

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

Compliance with Visible Emissions Notations and Parametric Monitoring Requirements satisfies, in part, CAM for the following units: secondary crusher (EU02), covered conveyor (EU03), tertiary crusher (EU04), conveyor used to bypass tertiary crusher (EU05), north stone bin (EU06), and south stone bin (EU07), dust tank system (EU21), CKD sales loadout spout (kiln #1 dust tank) (EU155), and elevator/dust tank (associated with the alkali bypass) for kiln #2 (EU28), clay crusher (EU08), coal draw-up covered conveying system (EU63), #1 clinker drag conveyor (EU23), apron conveyor (EU24), clinker can #1 (EU114), #2 clinker drag conveyor (EU30), apron conveyor (EU31), cross belt (EU119), clinker can #2 (EU120), long belt (EU25), north clinker transfer tower (EU32), covered incline belt (EU33), north clinker storage building (EU123), north reclaim

clinker covered conveyor system (EU34), south reclaim clinker covered conveyor (EU124), base tank (EU146), gypsum/stone/clinker transfer circuit ABC mills (EU35), clinker elevators (EU37), 2BC finish mill feed belt (EU132), 2A hopper / preliminary ball mill used to grind clinker and gypsum (EU38), finish mill circuit 2A (EU39), finish mill circuit 2B (EU40), finish mill circuit 2C (EU42), separator circuit, which includes an air transport system and pump (EU43), separator, which includes an air transport system and pump (EU41), BP tank for storing finished product (cement) (EU48), pump used to transfer material from the BP tank to silos (EU49.), gypsum elevator (EU135), 2D finish mill clinker bin transfer (EU44), 2D finish mill clinker / gypsum feed circuit (EU45), 2D finish mill roll press circuit with surge bin (EU46), 2D finish mill circuit (EU47), 501-Silos 25-44 (EU54), BIC mixer for mixing lime and pigment with the cement (EU55), BIC packer for loading cement into bags (EU56), 506-Silos 56-73 (EU53), bulk loading stations for railroad cars and trucks (EU57 and EU58), 504-Silos 45-48, and 50-55 (EU51), bulk loading station for trucks and railroad cars (EU52), 504 Silos Bank/Silo 49 (CKD sales) (EU153), CKD sales loadout spout for CKD destined for sale and/or reuse into process (EU154), and 502-Silos 1, 2, and 7-11 (EU50), pneumatic truck unloading stations to fly ash tanks (EU107 and EU108), silos for flyash (EU10 and EU11), silo for iron ore (EU12), C-15 covered conveyor system (EU09), Loesche raw mil (EU14), sidewinder (pneumatic transfer pump) (EU15), feed silo #1 for kiln feed (EU16), blend silo #2 (EU17), calibration system (EU18), coal (crusher) mill #1 (U66), coal (crusher) mill #2 (EU67), fuel oil-fired air preheater for kiln #1 coal mill (EU68), fuel oil-fired air preheater for kiln #2 coal mill (EU69), kiln #2 pulverized coal silo (EU149), kiln #2 coal weigh system (EU150), kiln #2 burner pump system (EU151), feed system for kiln #1 (EU19), rotary cement kiln #1 (EU20), feed system for kiln #2 (EU26), kiln #2 and associated preheater unit (EU27), clinker cooler #1 (EU22), and clinker cooler #2 (EU29).

These monitoring requirements are necessary because the baghouses must operate properly at all times the associated facilities/processes are in operation to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 6.5-1 (Particulate Emission Limitations Except Lake County), 40 CFR 64 (CAM), and PM/PM₁₀ emission limits, which render the requirements of 326 IAC 2-2 (PSD) not applicable.

(b) Parametric Monitoring - NO_x Continuous Emissions Monitoring (CEMS) Downtime

In the event that a nitrogen oxide CEMS fails, the Permittee shall monitor the oxygen content and temperature of the kiln exhaust at least once per hour. If the oxygen content or temperature is outside the range established in the latest compliance stack test, the Permittee shall take reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(c) Parametric Monitoring - Continuous Opacity Monitoring (COMS) Downtime

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

- (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

- (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
- (3) Method 9 readings may be discontinued once a COM is online.
- (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

Change No. 1:

Throughout the permit, the following change has been made:

... ~~the a~~ "responsible official" ...

Change No. 2:

Throughout the permit specifically stated timelines have been changed as follows:

... ~~within~~ **no later than** ...

The exceptions to this revision are as follows:

1. Wherever the timeframe states "within a reasonable" time. This is not considered a specifically stated timeframe.
2. Pursuant to 326 IAC 2-7-16(b)(4), for an emergency lasting one (1) hour or more, the Permittee notified the commissioner within four (4) business days. Pursuant to 326 IAC 2-7-16(b)(5), the Permittee submitted the notice either in writing or by facsimile of the emergency to the commissioner within two (2) working days. Therefore, this change has not been made in Section B - Emergency Provisions paragraph (b)(4) and (b)(5).
3. Pursuant to 326 IAC 2-7-19(b), a source shall pay the annual fee within thirty (30) calendar days of receipt of a billing by the department. Therefore, this change has not been made in Section B - Annual Fee Payment.
4. 326 IAC 2-2-8 (b)(4) and (b)(5) require the submittal of a report "within sixty (60) days". 326 IAC 2-3-2 (a)(m)(4) and (a)(m)(5) require the submittal of a report "within sixty (60) days". Therefore, this change has not been made in Section C - General Reporting Requirements paragraph (g).

Change No. 3:

On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section A - General Information, Section A - Emission Units and Pollution Control Equipment Summary, Section A - Specifically Regulated Insignificant Activities,

Section B - Preventative Maintenance Plan, Section B - Emergency Provisions, Section B - Operational Flexibility, **Section B - Advanced Source Modification Approval**, Section C - Risk Management Plan, the Facility Descriptions, **and Section D - Preventative Maintenance Plan.**

A.1 General Information [326 IAC 2-7-4(c)][~~326 IAC 2-7-5(15)~~ (14)][326 IAC 2-7-1(22)]

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[~~326 IAC 2-7-5(15)~~ (14)]

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[~~326 IAC 2-7-5(15)~~ (14)]

B.10 Preventive Maintenance Plan [326 IAC 2-7-5 (1),(3) and (13) (12)][~~326 IAC 2-7-6(1) and (6)~~][326 IAC 1-6-3]

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

* * *

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

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

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

* * *

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

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

C.12 Risk Management Plan [326 IAC 2-7-5 ~~(12)~~ (11)] [40 CFR 68]

SECTION D.X FACILITY OPERATION CONDITIONS - * * *

Facility Description [326 IAC 2-7-5~~(15)~~(14)]

* * *

SECTION E.1 PLANTWIDE APPLICABILITY LIMITATION REQUIREMENTS

Facility Description [326 IAC 2-7-5~~(15)~~(14)]

* * *

SECTION F.X FACILITY OPERATION CONDITIONS

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

* * *

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

Change No. 4:

IDEM has clarified what rule requirements a certification needs to meet. Therefore, where a certification is referenced the following changes have been made:

... does require ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)** ...

... does not require ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)**
...

... shall include a certification **that meets the requirements of 326 IAC 2-7-6(1)** ...

This report requires ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)**
...

The exceptions to this revision are as follows:

1. Section B - Annual Compliance Certification: With the exception of the final statement the word "certification" references the annual compliance certification report, not a certification in accordance with the requirements of 326 IAC 2-7-6(1). Therefore, the above revision is made only in the final statement.
2. Section B - Credible Evidence: The reference is to "compliance certifications" not a certification in accordance with 326 IAC 2-7-6(1).
3. Condition D.3.11 - Sulfur Dioxide Emissions and Sulfur Content contains certification requirements pursuant to 326 IAC 7, which are not subject to the requirements of 326 IAC 2-7-6(1).
4. Condition D.3.12 - Continuous Emissions Monitoring contains certification requirements pursuant to 326 IAC 3, which are not subject to the requirements of 326 IAC 2-7-6(1).
5. Condition E.1.5 - Record Keeping Requirements references the Section B - Annual Compliance Certification not a certification in accordance with 326 IAC 2-7-6(1).

Change No. 5:

In order to clarify the intent of the conditions, IDEM has made the following revisions:

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. ~~The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

* * *

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

- (a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a "responsible official" of truth, accuracy, and completeness. This certification shall state that, A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:~~
- (1) **it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1(34), and**
 - (2) **the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.**
- (b) ~~One (1) certification shall be included, using~~ **The Permittee may use** the attached Certification Form, **or its equivalent**, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

* * *

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

- (a) **A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:** ~~If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:~~
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- The Permittee shall implement the PMPs.**
- (b) **If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:**
- (1) **Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;**
 - (2) **A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**
 - (3) **Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

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

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

* * *

~~(h)~~ The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.17B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

* * *

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, **pursuant to 326 IAC 2-7-4(a)(2)(D)**, in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19B.18 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

* * *

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) ~~Any~~ **P**reconstruction approval ~~required~~ is not required by 326 IAC 2-7-10.5;

* * *

C.1 Opacity [326 IAC 5-1]

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

* * *

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

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

G.8C.7 Performance Testing [326 IAC 3-6]

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

A For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

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

* * *

G.17C.14 Actions Related to Noncompliance Demonstrated by a Stack Test
[326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, ~~the Permittee shall take appropriate response actions. The Permittee shall submit a description of its these response actions to IDEM, OAQ, within no later than thirty (30) days of receipt of the test results~~ **seventy-five (75) days after the date of the test.** ~~The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

- (b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred ~~eighty (180) twenty (120)~~ **days after the date of the test**. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~eighty (180) twenty (120)~~ days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

Additionally, throughout the Section D conditions, the following change has been made:

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

C.18C.15 Emission Statement

~~[326 IAC 2-7-5(3)(C)(iii)]~~~~[326 IAC 2-7-5(7)]~~~~[326 IAC 2-7-19(c)]~~~~[326 IAC 2-6]~~

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-51 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

C.21C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- ~~(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.~~
- ~~(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.~~
- ~~(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.~~

Change No. 6:

Section B - Deviations from Permit Requirements and Conditions has been removed from the permit and combined into the Section C - General Reporting Requirements. The following changes have been made to the permit:

~~B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]~~

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

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

~~using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.~~

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

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

Change No. 7:

Numerous Section D Conditions state that the requirements are to be in accordance with a specified Section B or Section C condition. Additionally, the corresponding Section B and Section C conditions state that applicability is determined when required by a Section D requirement. In order to clarify what condition specifies the applicable requirements, the Section D conditions have been revised and now specify the Section B or Section C conditions that contain the Permittee's obligation required by the Section D condition. The following are examples of the revisions made throughout the Section D conditions of the permit:

1. Preventive Maintenance Plan
~~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. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.~~

2. Testing Requirements
~~Within~~ **Not later than** 180 days after issuance of Part 70 Operating Permit No. XXX-XXXXX-XXXXX, in order to demonstrate compliance with Condition D.X.X, the Permittee shall perform XXX testing of XXX utilizing methods approved by the Commissioner at least once every XX years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures)**. Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

3. Visible Emissions Notations

* * *

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

4. Parametric Monitoring
The Permittee shall record the pressure drop across each baghouse, used in conjunction with the facilities listed in this section, at least once per day when the associated facility is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of x to y inches of water or the range established during the most recent stack test, the Permittee shall take reasonable response. ~~steps in accordance with~~ Section C – Response to Excursions and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C – Response to Excursions and Exceedances~~ shall be considered a deviation from this permit.

5. Record Keeping Requirements

* * *

(d) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements of this permit **contains the Permittee's obligation with regard to the records required by this condition**.

6. Reporting Requirements
A quarterly summary of the information to document **the compliance status** with the limit specified in Condition D.1.1(b) - Prevention of Significant Deterioration (PSD) Minor Limit PM 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 not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition**. This report submitted by the Permittee does require ~~the~~ a certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ a "responsible official" as defined by 326 IAC 2-7-1(34).

7. Additionally, the following specific Conditions have been revised as follows:

~~C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]~~

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all continuous opacity monitoring systems (COMS) and related equipment required by this permit.~~
- ~~(b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.~~
- ~~(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.~~
- ~~(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.~~
- ~~(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.~~
- ~~(3) Method 9 readings may be discontinued once a COMS is online.~~
- ~~(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.~~
- ~~(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, 40 CFR 60, and 40 CFR 63).~~

The requirements of the Section C - Maintenance of Continuous Opacity Monitoring Equipment have been moved to the appropriate D Section.

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

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

Change No. 8:

Section D Conditions can state that the requirements are to be in accordance with a Section C condition. In order to clarify what condition specifies the applicable requirements, any corresponding Section D conditions have been revised and now specify that the Section C - condition contains the Permittee's obligation required by the Section D condition. Additionally, in order to clarify the Permittee's responsibility under CAM, the Section C - Compliance Monitoring Condition and Section C - Response to Excursions or Exceedances have been revised as follows:

C-10C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

- (a) Unless otherwise specified in this permit, **for all monitoring and record-keeping requirements not already legally required, the Permittee shall be allowed up to** ~~shall be implemented within~~ ninety (90) days of **from the date of** permit issuance or ~~ninety (90) days of initial start-up, whichever is later, to begin such monitoring.~~ **If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.** If due to circumstances beyond ~~its~~ **the Permittee's** control, **that any monitoring equipment required by this permit cannot be installed and operated within no later than** ninety (90) days **after permit issuance or the date of initial startup, whichever is later,** the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a "responsible official"** as defined by 326 IAC 2-7-1(34).

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

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

C-16C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- ~~(a)~~(1) ~~Upon detecting an excursion or exceedance, the~~ **The** Permittee shall **take reasonable response steps to** restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing **excess** emissions.
- ~~(b)~~(2) The response shall include minimizing the period of any startup, shutdown or malfunction and ~~taking any reasonable response steps to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions~~ **The response** may include, but ~~are~~ **is** not limited to, the following:
- ~~(1)~~(A) initial inspection and evaluation;
- ~~(2)~~(B) recording that operations returned **or are returning** to normal without operator action (such as through response by a computerized distribution control system); or
- ~~(3)~~(C) any necessary follow-up actions to return operation to ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable~~ **normal or usual manner of operation.**
- ~~(c)~~(3) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- ~~(1)~~(A) monitoring results;
- ~~(2)~~(B) review of operation and maintenance procedures and records; and/or
- ~~(3)~~(C) inspection of the control device, associated capture system, and the process.
- ~~(d)~~(4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- ~~(e)~~(5) The Permittee shall **record** ~~maintain the following records~~ **the reasonable responses steps taken.** ÷
- ~~(1)~~ ~~monitoring data;~~
- ~~(2)~~ ~~monitor performance data, if applicable; and~~
- ~~(3)~~ ~~corrective actions taken.~~

(b)

- (1) **CAM Response to excursions or exceedances.**
- (A) **Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal**

operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

- (B) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

Change No. 9:

On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions included the incorporation of the U.S. EPA's definition of reasonable possibility. The permit previously sited to the EPA definition. Also, the revisions resulted in changes to other rule sites listed in the permit. Neither of these changes are changes to the underlining provisions. The change is only to site of these rules. Additionally, the Section C - General Record Keeping Requirements Condition has been revised in order to clarify the Permittee's responsibility with regards to record keeping.

C.49C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
[326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following:**

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)~~ **326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (I)(6)(A), and/or 326 IAC 2-3-2 (I)(6)(B)**) that a "project" (as defined in ~~326 IAC 2-2-1(oo)~~ and/or ~~326 IAC 2-3-1(jj)~~) at an existing emissions unit, other than projects at a source with a Plantwide

Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(~~ee dd~~) and/or 326 IAC 2-3-1(~~z y~~)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(~~ff pp~~) and/or 326 IAC 2-3-1(~~mm kk~~)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(~~qq oo~~) and/or 326 IAC 2-3-1(~~jj~~)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(~~ff pp~~)(2)(A)(iii) and/or 326 IAC 2-3-1 (~~mm kk~~)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)~~ **326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (I)(6)(A)**) that a “project” (as defined in 326 IAC 2-2-1(~~qq oo~~) and/or 326 IAC 2-3-1(~~jj~~)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(~~ee dd~~) and/or 326 IAC 2-3-1(~~z y~~)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(~~ff pp~~) and/or 326 IAC 2-3-1(~~mm kk~~)), the Permittee shall comply with following:
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

Change No. 10:

Section B - Deviations from Permit Requirements and Conditions has been removed from the permit and combined into the Section C - General Reporting Requirements. On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions included the incorporation of the U.S. EPA's definition of reasonable possibility. The permit previously sited to the EPA definition. Also, the revisions resulted in changes to other rule sites listed in the permit. Neither of these changes are changes to the underlining provisions. The

change is only to site of these rules. Additionally, the Section C - General Reporting Requirements Condition has been revised in order to clarify the Permittee's responsibility under CAM and IDEM, OAQ has revised the interaction of the Quarterly Deviation and Compliance Monitoring Report and Emergency Provisions.

C.29C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2][**40 CFR 64**] [**326 IAC 3-8**]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph.** Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported **except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.** This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ a certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ a "responsible official" as defined by 326 IAC 2-7-1(34). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

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

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

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

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

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

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

(c) * * *

~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by a "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(e)~~**(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period.** Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

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

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

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

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

* * *

(4) Any other information that the Permittee ~~deems fit~~ **wishes** to include in this report **such as an explanation as to why the emissions differ from the preconstruction projection.**

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE and ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Essroc Cement Corporation

Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit Renewal No.: T019-26989-00008

Months: _____ to _____ Year: _____

Page 1 of 2

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

* * *

Change No. 11:

With regards to record keeping requirements for visible emission notations (and other parametric monitoring), the intent is that the Permittee needs to make a record of some sort every day. So if the Permittee is making the VE observation, it should be noted whether the observation is normal or abnormal. Additionally, if the VE observation is not made, the Permittee should still make some sort of record that day as to why the VE was not taken, such as the unit was not operating, or the unit was venting indoors that day, etc. In order to attempt to clarify the requirements, the recordkeeping requirements relating to the VEs and other daily parametric monitoring have been revised.

Change No. 12:

IDEM, OAQ no longer incorporates the applicable requirements of 40 CFR 60 (NSPS) subparts or 40 CFR 63 (NESHAP) subparts into the D Sections of the permit. Instead, the applicable requirements are referenced by citation in Section F conditions of the permit, and the referenced subparts are included, in entirety, as attachments to the permit as follows.

- New Section F.1 references the applicable requirements of 40 CFR 60, Subpart Y (Standard of Performance for Coal Preparation Plants) by citation. 40 CFR 60, Subpart Y is included in its entirety as Attachment A to the permit.
- New Section F.2 references the applicable requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) by citation. 40 CFR 63, Subpart LLL is included in its entirety as Attachments B and C to the permit.

Section D conditions incorporating the applicable requirements under 40 CFR 60 and/or 40 CFR 63 have been deleted from the permit. Therefore, the following conditions, which contained requirements pursuant to 40 CFR 60 and/or 63 have been deleted from the permit.

- Original Condition D.2.2 - General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- Original Condition D.2.3 - NESHAP Emissions Limitation [40 CFR 63, Subpart LLL] [326 IAC 20-27-1]

- Original Condition D.2.7(a) - Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 60, Subpart F] [40 CFR 63, Subpart LLL]
- Original Condition D.2.9 - NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL][326 IAC 20-27-1]
- Original Condition D.2.13(c) - Record Keeping Requirements
- Original Condition D.2.14 - Reporting Requirements
- Original Condition D.3.4 - General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- Original Condition D.3.5 - NESHAP Emissions Limitation [40 CFR Part 63, Subpart LLL]
- Original Condition D.3.8 - NSPS for Coal Preparation Plants [326 IAC 12] [40 CFR 60, Subpart Y]
- Original Condition D.3.10 (b), (c), (d), and (e) - Testing Requirements [40 CFR 63, Subpart LLL] [326 IAC 20-27-1][326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]
- Original Condition D.3.15 - NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL][326 IAC 20-27-1]
- Original Condition D.3.21 (d) and (f) - Record Keeping Requirements
- Original Condition D.3.22 (f), (h), and (i) - Reporting Requirements
- Original Condition D.4.4 - Determinations of Nonapplicability [40 CFR 63.460 (Subpart T)] [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

Change No. 13:

IDEM, OAQ no longer specifies determinations of non-applicability in the Section D conditions. Instead, at the request of the Permittee, the non-applicability determinations are contained within Section B - Permit Shield.

The following conditions have been deleted from the D Sections and incorporated into the Section B - Permit Shield condition.
permit.

- Original Condition D.1.2 - Determinations of Nonapplicability [40 CFR 60, Subparts A, F, and OOO] [40 CFR 63, Subparts A and LLL]
- Original Condition D.2.4 - Determinations of Nonapplicability [40 CFR 60, Subparts A and F]
- Original Condition D.3.6 - Determinations of Nonapplicability [40 CFR 60, Subparts A and F]

Change No. 14:

The facility descriptions in Sections A.3 and A.4 and the Facility Description Boxes of the D Sections have been revised to include the bag flattener (EU156); to incorporate descriptive changes requested by Essroc Cement Corporation; and to incorporate the following:

- (a) The descriptions of the following emission units have been updated to better reflect operating conditions, capacity, and/or material(s) handled: (EU99), (EU104), (EU113), (EU117), (EU106), (EU08), (EU136), (EU31), (EU33), (EU125), (EU146), (EU35), (EU43), (EU41), (EU135), (EU44), (EU55), (EU59), (EU60), (EU61), (EU107), (EU108), (EU109), (EU10), (EU11), (EU12), (EU09), (EU15), (EU16), (EU68), (EU69), (EU149), and (EU151).
- (b) Addition of the following new facilities:
 - (1) One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157, constructed in 2009, with emissions uncontrolled.

- (2) The number of 501-Silos (EU54) has increased by five (5). These Silos have always been present, but previously uncounted.
- (3) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled.
- (c) Three (3) silos for fly ash, previously identified collectively as EU10, are now identified individually as follows:
 - (1) Two (2) silos for flyash, identified as EU10 and EU11.
 - (2) One (1) silo for iron ore, identified as EU12.
- (d) Numerous emission unit / baghouse configurations have been updated. The updates are shown in the following table.

Emission Unit	Baghouses	
	As Previously Configured	As currently configured
EU24	218 / 31382	218
EU114	218 / 31382	31382
EU31	234 / 31382	234
EU120	234 / 31382	31382
EU25	219	218 / 35925
EU32	219	35925
EU34	245	35927
EU35	131 / 132	131 / 31495 / 31496
EU37	134	133
EU132	none	135 / 137
EU43	137	138
EU41	135	136
EU45	262 / 31497 / 31498	36643 / 31497 / 31498
EU47	139	139 / 36643
EU55	226	224 / 225
EU56	226	224 / 225
EU107	228	228 / 35363
EU108	228	228 / 35363
EU10	228	228 / 35363
EU11	228	228 / 35363
EU12	228	35363
EU09	227 / 229	227 / 35134 / 35137

- (e) EU47 contains only one (1) cement cooler, not three (3).
- (f) The removal of the following facilities from the source:
 - (a) One (1) tertiary crusher, identified as EU04a, constructed in 1956.
 - (b) Vacuum system, identified as EU73, constructed in 1985.
 - (c) One (1) clinker transfer circuit ABC mills, including conveyor transfers and clinker scales, identified as EU36, constructed in 1964.

The Facility Description Boxes of the D Sections and E Sections have been revised to reflect these changes and Sections A.3 and A.4 have been revised as follows:

* * *

Raw material stockpile operations

* * *

- (6) Truck unloading to additive hopper or additive storage ~~pile piles (sand, iron, or Missouri clay)~~ **various sources of Silica/Alumina/Iron**, identified as EU99, constructed in 1948, with emissions uncontrolled.
- (7) **Various sources of Silica/Alumina/Iron** additive storage ~~pile piles~~, identified as EU100, created before 1945.

* * *

- (11) Covered clay **and ash** storage piles, identified as EU104, created before 1945.

Raw Material Sizing Operations

* * *

- (19) ~~Two (2)~~ **One (1)** tertiary crushers, identified as EU04 ~~and EU04a~~, both constructed in 1956, each with a nominal throughput of 350 tons per hour, with PM emissions ~~from both crushers~~ controlled by one (1) baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.
- (20) One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05, constructed in 1956, with emissions controlled by a baghouse, identified as baghouse 201, and exhausting to one (1) stack, identified as EP03.

* * *

Kiln #1 Cement Kiln Dust (CKD) Operations

* * *

- (36) Truck loading ~~from the dust tank system~~ **from baghouse 221**, identified as EU113, with emissions uncontrolled, commenced during July 1971.

* * *

Kiln #2 Cement Kiln Dust (CKD) Operations

* * *

- (40) Truck **loading from baghouse 16 (alkali bypass system)** ~~unloading to CKD storage pile~~, identified as EU117, with emissions uncontrolled, commenced during 1977.
- (41) **One (1) elevator/dust tank (associated with the alkali bypass) for kiln #2, identified as EU28, constructed in 1977, with emissions controlled by baghouse 232 and exhausting to stack EP23.**

Miscellaneous Facilities

- (43) ~~Vacuum system, identified as EU73, constructed in 1985, with emissions controlled by a baghouse with a nominal air flow rate of 400 actual cubic feet per minute, identified as baghouse 250, and exhausting to stack EP75.~~

* * *

Clay Processing Operations

* * *

- (45) One (1) covered conveyor system for transferring material from storage piles ~~and clay hopper~~ to the clay crusher, identified as EU106, constructed before 1954, with a nominal throughput of ~~300~~ **75** tons per hour, with emissions uncontrolled.
- (46) One (1) clay crusher, identified as EU08, constructed in 1977, with a nominal throughput of ~~40~~ **75** tons per hour, with emissions controlled by a baghouse, identified as baghouse 227, and exhausting to stack EP07.

* * *

Fossil Fuel Storage and Handling Facilities

- (52) ~~One (1) truck unloading station~~ **Coal trucks unloading** to the **coal storage piles and reserve coal storage pile piles**, identified as EU136, constructed in June 1971, with emissions uncontrolled.
- (53) ~~One (1) reserve~~ **Reserve** coal storage ~~pile piles~~, identified as EU137, created in May 1971.
- (54) ~~One (1) coal~~ **Coal** storage ~~pile piles~~, identified as EU142, constructed prior to 1945.

* * *

Kiln #1 Clinker Handling Facilities

* * *

- (59) Apron conveyor for transferring clinker from the #1 clinker drag conveyor to either the clinker can #1 or the long belt, identified as EU24, constructed in May 1971, with a nominal throughput of 100 tons per hour, with emissions controlled by ~~two baghouses~~ **one (1) baghouse**, identified as baghouse 218, exhausting to one (1) stack identified as ~~EPN21 EP20, and baghouse 31382, exhausting to one (1) stack identified as EPN1.~~
- (60) Clinker can #1, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU114, constructed in May 1971, with emissions controlled by ~~two baghouses~~ **one (1) baghouse**, identified as baghouse ~~31382 218~~, exhausting to one (1) stack identified as ~~EP20 and baghouse 31382, exhausting to one (1) stack identified as EPN1.~~

Kiln #2 Clinker Handling Facilities

- (61) **One (1) Kreyling hopper to feed weathered clinker to the clinker cooler #2, identified as EU157, constructed in 2009, with emissions uncontrolled.**

* * *

~~(62)~~**(63)** One (1) almond conveyor used for transferring clinker **and clinker dust** from the #2 clinker drag conveyor, **#2 cooler, and baghouse 17** to the clinker can #2 or the cross belt, identified as EU31, constructed in 1977, with a nominal throughput of 150 tons per hour, with emissions controlled by ~~two baghouses~~ **one (1) baghouse**, identified as baghouse 234, exhausting to one (1) stack identified as EP26 ~~and baghouse 31382, exhausting to one (1) stack identified as EPN1.~~

~~(63)~~**(64)** One (1) cross belt for transferring clinker ~~from the almond conveyor~~ to the long belt, identified as EU119, constructed in May 1971, with a nominal throughput of 150 tons per hour, with emissions controlled by a baghouse, identified as baghouse 218, and exhausting to one (1) stack identified as ~~EP20~~ **EPN21**.

~~(64)~~**(65)** Clinker can #2, which is a vertical bin with a lid used for storing off-spec clinker, identified as EU120, constructed in 1977, with emissions controlled by ~~two baghouses~~ **one (1) baghouse**, identified as ~~baghouse 234, exhausting to one (1) stack identified as EP26~~ **and baghouse 31382, exhausting to one (1) stack identified as EPN1.**

Clinker Handling to Crane Storage Facilities

~~(65)~~**(66)** One (1) long belt for transferring clinker from the apron conveyor and the cross belt to the North clinker transfer tower, identified as EU25, constructed in May 1971, with a nominal throughput of 200 tons per hour, with emissions controlled by ~~a baghouse~~ **two (2) baghouses**, identified as baghouse 249 **35925**, ~~and~~ exhausting to one (1) stack identified as EP27, **and baghouse 218, exhausting to one (1) stack identified as EPN1.**

~~(66)~~**(67)** One (1) North clinker transfer tower for transferring clinker from the long belt to the covered incline belt (~~shuttle belt~~), identified as EU32, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 249 **35925**, and exhausting to one (1) stack identified as EP27.

~~(67)~~**(68)** One (1) covered incline belt (~~Shuttle belt~~) used for transferring clinker from the North clinker transfer tower to the **Shuttle Belt then to the** North clinker storage building, identified as EU33, constructed in 1972, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 35931, and exhausting to one (1) stack identified as EPN7.

* * *

~~(71)~~**(72)** One (1) North reclaim clinker covered conveyor system used to transfer clinker from the North clinker storage building and baghouse dust from baghouse 35391 to either, 1) the South reclaim clinker covered conveyor system (EU124) or, 2) the 2D finish mill clinker bin transfer (EU44) ~~transfer tower (covered conveyor)~~, identified as EU34, constructed in 1962, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse 245 **35927**, and exhausting to one (1) stack identified as EP29.

* * *

~~(73)~~**(74)** Truck loading station, used for loading material from the North clinker storage pile **and clinker storage pile**, identified as EU125, constructed in May 1971, with emissions uncontrolled.

* * *

2ABC Finish Mill Facilities

- ~~(75)~~**(76)** One (1) ~~CKD/Lime Base~~ **Base tank (CKD)**, identified as EU146, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 143, and exhausting to one (1) stack identified as EP84.
- ~~(76)~~**(77)** One (1) gypsum/stone/~~clinker~~ **clinker** transfer circuit ABC mills, including material transfers and scales, identified as EU35, constructed in 1964, with a nominal throughput of ~~300~~ **200** tons per hour, with emissions controlled by ~~two (2)~~ **three (3)** baghouses, identified as baghouses 131 and 132, **31495, and 31496**, and exhausting to ~~two (2)~~ **three (3)** stacks identified as EP30, **EPN3, and EPN4** and EP31, **respectively**.
- ~~(77)~~ One (1) clinker transfer circuit ABC mills, including conveyor transfers and clinker scales, identified as EU36, constructed in 1964, with a nominal throughput of 200 tons per hour, with emissions controlled by two ~~(2)~~ baghouses, identified as baghouse 31495, exhausting to one (1) stack identified as EPN3, and baghouse 31496, exhausting to one (1) stack, identified as EPN4.
- (78) Two (2) clinker elevators, identified as EU37, constructed in 1969, with a nominal throughput of 200 tons per hour, with emissions controlled by a baghouse, identified as baghouse ~~134~~ **133**, and exhausting to one (1) stack identified as ~~EP34~~ **EP33**.
- (79) One (1) 2BC finish mill feed belt, identified as EU132, constructed in 1977, with a nominal throughput of 200 tons per hour, with emissions **controlled by two (2) baghouses, identified as baghouses 135 and 137, exhausting to two (2) stacks identified as EP35 and EP37, respectively** uncontrolled.

* * *

- (82) One (1) finish mill circuit 2B, which includes the feed hopper, feed belt, finish mill, **and** elevator, ~~and air transport system~~, collectively identified as EU40, constructed in 1953, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse 135, and exhausting to one (1) stack identified as EP35.

* * *

- (84) One (1) separator **circuit, which includes an air transport system and pump** and ~~cement cooler~~, used in conjunction with the finish mill circuit 2C, identified as EU43, constructed in 1960 and 1964 respectively, with a nominal throughput of 36 tons per hour, with emissions controlled by a baghouse, identified as baghouse ~~137~~ **138**, and exhausting to one (1) stack identified as EP37.
- (85) One (1) separator, **which includes an air transport system and pump**, and ~~cement cooler~~, used in conjunction with the finish mill circuit 2B, identified as EU41, constructed in 1953 and 1955 respectively, with a nominal throughput of 25 tons per hour, with emissions controlled by a baghouse, identified as baghouse ~~135~~ **136**, and exhausting to one (1) stack identified as EP35.

* * *

2D Finish Mill Facilities

- (88) One (1) gypsum elevator used to transfer material from the gypsum storage piles to the ~~clinker draw-up system D mill~~ **2D finish mill circuit**, identified as EU135, constructed in 1964, with a nominal throughput of 45 tons per hour, with emissions controlled by a

baghouse, identified as baghouse 120, and exhausting to one (1) stack identified as EP40.

- (89) One (1) 2D finish mill clinker bin **transfer**, which includes the elevator, conveyor belts, and air transport system, identified as EU44, constructed in 1964, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 120, and exhausting to stack identified as EP40.
- (90) One (1) 2D finish mill clinker / gypsum feed circuit which includes scales and feed belts, identified as EU45, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by three (3) baghouses, identified as baghouse ~~262~~ **36643**, exhausting to one (1) stack identified as ~~EP94~~ **EPN11**, baghouse 31497 exhausting to one (1) stack identified as EPN5, and baghouse 31498 exhausting to one (1) stack identified as EPN6.

* * *

- (92) One (1) 2D finish mill circuit, which includes conveyor transfer, elevator, finish mill, elevator, classifier, and ~~three (3) cement coolers~~ **a cement cooler**, identified as EU47, constructed in 1964, with a nominal throughput of 140 tons per hour, with emissions controlled by ~~a baghouse~~ **two (2) baghouses**, identified as baghouses 139 and **36643**, and exhausting to ~~one (1) stack~~ **two (2) stacks** identified as EP41 and **EPN11**, respectively.

Finish Product 501-Silos Storage and Packing Facilities

- (93) 501-Silos ~~30~~ **25-44**, identified as EU54, constructed in 1965, with emissions controlled by five (5) baghouses, identified as baghouses 224, 225, 246, 150, and 151, and exhausting to five (5) stacks identified as EP63 through EP67, **respectively**.
- (94) One (1) BIC mixer for mixing lime and pigment with the ~~clinker-cement~~, identified as EU55, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by ~~a baghouse~~ **two (2) baghouses**, identified as ~~baghouse 226~~ **baghouses 224 and 225**, and exhausting to ~~one (1) stack~~ **two (2) stacks** identified as **EP 102 and EP68**.
- (95) One (1) BIC packer for loading cement into bags, identified as EU56, constructed in 1973, with a nominal throughput of 45 tons per hour, with emissions controlled by ~~a baghouse~~ **two (2) baghouses**, identified as ~~baghouse 226~~ **baghouses 224 and 225**, and exhausting to ~~one (1) stack~~ **two (2) stacks** identified as **EP 102 and EP68**.

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

- (96) 506-Silos 56-73, identified as EU53, constructed in 1958, with emissions controlled by fourteen (14) baghouses, identified as baghouses 159 through 172, and exhausting to fourteen (14) stacks identified as EP49 through EP62, **respectively**.

* * *

- (98) One (1) **north** packer #1 for loading cement into bags, identified as EU59, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 173, and exhausting to one (1) stack identified as EP71.
- (99) One (1) **center** packer #2 for loading cement into bags, identified as EU60, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a

baghouse, identified as baghouse 174, and exhausting to one (1) stack identified as EP72.

- (100) One (1) **south** packer #3 for loading cement into bags, identified as EU61, constructed in 1960, with a nominal throughput of 45 tons per hour, with emissions controlled by a baghouse, identified as baghouse 175, and exhausting to one (1) stack identified as EP73.

* * *

Finish Product 504-Silos Storage and Bulk Loading Facilities

- (102) 504-Silos 45-48, and 50-55, identified as EU51, constructed in 1959, with emissions controlled by four (4) baghouses, identified as baghouses 153 through 156, and exhausting to four (4) stacks identified as EP44 through EP47, **respectively**.

* * *

- (105) CKD sales loadout spout **for CKD destined for sale and/or reuse into process**, identified as EU154, constructed in 1999, with emissions controlled by a baghouse, identified as baghouse 265 and exhausting to stack EP97.

Finish Product 502-Silos Storage and Bulk Loading Facilities

- (106) 502-Silos 1, 2, and 7-11, identified as EU50, constructed in 1966, with emissions controlled by two (2) baghouses, identified as baghouses 148 and 149 ~~respectively~~, and exhausting to two (2) stacks, identified as EP42 and EP43, **respectively**.

Raw Mill Facilities

- (107) Two (2) pneumatic truck unloading stations, **identified as EU107 and EU108, constructed in July 1976, to fly ash tanks additive bins, identified as (EU107 and EU108), constructed in July 1976,** with emissions controlled by ~~one (1)~~ **two (2)** baghouses, identified as baghouse 228 **and baghouse 35363**, and exhausting to stacks EP09 **and EPN12, respectively**.
- (108) One (1) **iron ore** ~~clay~~ hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled.
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled.**
- ~~(109)~~ **(110) Two (2) silos** ~~Three (3) silos~~ for flyash, identified as EU10 **and EU11**, equipped with ~~one (1) elevator, constructed in 1977 and replaced in 1994,~~ with emissions controlled by **two (2) baghouses** ~~one (1) baghouse,~~ identified as baghouse 228 **and** exhausting to stack EP09, **and baghouse 35363 exhausting to stack EPN12, respectively.** ~~One of the elevators was replaced in 1994.~~
- (111) One (1) silo for iron ore, identified as EU12, equipped with one (1) elevator, constructed in 1977, with emissions controlled by one (1) baghouse, baghouse 35363 (west flyash tank baghouse) and exhausting to stack EPN12.**
- ~~(110)~~**(112)** One (1) C-15 covered conveyor system for transferring material from the clay breaker, **bottom ash hopper, iron ore tank, fly ash tanks, raw material pile** ~~additive bin 2,~~ and the main limestone storage pile to the ~~triple gate~~ **Loesche raw mill**, identified as EU09, constructed in 1977, with a nominal throughput of 300 tons per hour, with

emissions controlled by ~~two (2)~~ **three (3)** baghouses, identified as baghouses 227 (**clay crusher**), **35134 (C-15 east flyash feeder)**, and ~~229~~ **35137 (C-15 west)**, and exhausting to stacks EP07, **EPN13**, and ~~EP08~~ **EPN10**, respectively.

* * *

~~(112)~~**(114)** One (1) sidewinder (pneumatic transfer pump) used for pumping the kiln feed ~~from to the feed and blend silos to triple gate~~, identified as EU15, constructed in 1977, with a nominal throughput of 300 tons per hour, with emissions controlled by one (1) baghouse, identified as baghouse 247 and exhausting to stack EP-11.

* * *

~~(115)~~**(117)** **Feed Blend** silo #1 for ~~blending~~ kiln feed, identified as EU16, constructed in May 1971, with emissions controlled by one (1) baghouse, identified as baghouse 211, and exhausting to stack EP12.

* * *

Coal handling, milling and storage facilities

~~(118)~~**(120)** Coal (crusher) mill #1, identified as EU66 servicing kiln #1, constructed in May 1971, with a nominal throughput of 12.5 tons per hour, with emissions routed to kiln #1 and controlled by baghouse 221 and exhausting to one (1) stack, identified as ~~(EP16)~~ S-14. **Note: For the purposes of NSPS Subpart Y applicability, this is also a thermal dryer.**

* * *

~~(120)~~**(122)** One (1) fuel oil-fired air ~~heater~~ **preheater** for kiln #1 coal mill, identified as EU68, constructed in May 1971, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #1 coal mill then routed to kiln #1 and controlled by one (1) baghouse, identified as baghouse 221 and exhausting to stack S-14.

~~(124)~~**(123)** One (1) fuel oil-fired air ~~heater~~ **preheater** for kiln #2 coal mill, identified as EU69, constructed in 1977, with a nominal heat input capacity of 5.3 million British thermal units per hour, with emissions exhausting directly to the kiln #2 coal mill controlled by one (1) baghouse identified as baghouse 252, exhausting to stack EP88. **Note: For the purposes of NSPS Subpart Y applicability, this is also a thermal dryer.**

~~(122)~~**(124)** Kiln #2 **pulverized** coal ~~dust~~ silo, identified as EU149, constructed in 1996, with emissions controlled by one **(1)** baghouse with a nominal air flow rate of 200 actual cubic feet per minute, identified as baghouse 253 and exhausting to one (1) stack identified as EP101.

* * *

~~(124)~~**(126)** Kiln #2 ~~coal handling~~ **burner pump** system, identified as EU151, constructed in 1996, with a nominal throughput of 20 tons per hour, with emissions controlled by one filter, identified as filter 255 and exhausting to a vent.

The kiln #1 and kiln #2 facilities

~~(125)~~**(127)** One (1) feed system for kiln #1, identified as EU19, constructed in May 1971, with a nominal throughput of 105 tons per hour, with PM emissions from the alleviator controlled by one (1) baghouse, identified as baghouse 209 and exhausting to stack

EP15 and with PM emissions from the scales and pump controlled by one (1) baghouse, identified as baghouse 212 and exhausting to stack ~~EP12~~ **EP14**.

* * *

~~(129) One (1) Elevator/dust tank (alkali bypass) for kiln #2, identified as EU28, constructed in 1977, with emissions controlled by a baghouse, identified as baghouse 232, and exhausting to stack EP23.~~

Insignificant Activities:

* * *

Finish Product 501-Silos Storage and Packing Facilities

(4) One (1) bag flattener for eliminating void space in cement bags at the BIC packer, identified as EU156, installed in 2012, with emissions controlled by one (1) baghouse, identified as baghouse 225, and exhausting to one (1) stack, identified as EP64. [326 IAC 6.5-1-2] [40 CFR 63, Subpart LLL]

Change No. 15:

Prior to issuance of Part 70 Operating Permit 019-6016-00008 (issued June 15, 2004), IDEM, OAQ had determined that for numerous emissions units 326 IAC 6-1 was not applicable. Therefore, these emissions units were permitted with PM emissions limitations established under 326 IAC 6-3-2. Upon issuance of T019-6016-00008 on June 15, 2004, these emissions units were permitted under the requirements of 326 IAC 6.5-1 (the re-codified version of 326 IAC 6-1).

In a similar situation, Cause No. 02-A-J-2920, the Indiana Office of Environmental Adjudication ruled on May 14, 2004 that IDEM shall apply the previous interpretation of the rule (326 IAC 6-1). Any emissions units permitted subject to 326 IAC 6-3-2 shall remain subject to 326 IAC 6-3-2.

Therefore, in accordance with the ruling, IDEM will remove the requirements of 326 IAC 6.5-1 and re-instate the requirements of 326 IAC 6-3-2 for the emissions units previously permitted with PM emissions limitations established under 326 IAC 6-3-2. New Conditions D.1.3 – Particulate Emissions [326 IAC 6-3-2], D.2.3 – Particulate Emissions [326 IAC 6-3-2], and D.3.4 – Particulate Emissions [326 IAC 6-3-2] have been added to the permit.

Change No. 16:

Conditions D.1.5 (formerly D.1.4) - Particulate Matter (PM) Control and D.2.6 (formerly D.2.8) - Particulate Matter (PM) Control have been revised to include a table of the specific emission units and associated control devices subject the requirements.

Change No. 17:

Original Condition D.1.1 - Particulate Matter (PM) [326 IAC 6.5-1-2] [326 IAC 2-2], has been separated into the following three (3) Conditions: Condition D.1.1 - Prevention of Significant Deterioration (PSD) Minor Limit PM/PM₁₀ [326 IAC 2-2], Condition D.1.2 - Particulate Matter (PM) [326 IAC 6.5-1-2] [326 IAC 6.5-1-4], and Condition D.1.3 - Particulate Emissions [326 IAC 6-3-2].

Change No. 18:

Since emission unit EU28 is no longer part of Section D.3, it is now included in Section D.1. EU28. In order to demonstrate compliance with 326 IAC 6.5-2-4, original Condition D.3.10

required PM testing for EU28. As part of this permitting action, it has been determined that EU28 is not subject to the requirements of 326 IAC 6.5-2.4. Therefore, the testing requirement has been removed.

Change No. 19:

The CKD sales loadout spout (kiln #1 dust tank) (EU155), is subject to a PM limit of 0.03 grains per dry standard cubic foot (dscf) of exhaust air under 326 IAC 6.5-1-2. However, the manufacturer's specifications for the baghouse, submitted as part of Part 70 Operating Permit T019-6016-00008, specified 0.04 grains per dry standard cubic foot (dscf) of exhaust air.

Therefore, IDEM, OAQ has determined that the existing testing requirement for PM for the CKD sales loadout spout (kiln #1 dust tank) (EU155) is necessary. IDEM, OAQ recognized that market demands drive the necessity to operate the CKD sales loadout spout (kiln #1 dust tank) (EU155). Original Condition D.1.5 - Testing Requirements has been revised. The requirement to test within 180 days after issuance of Part 70 Operating Permit (T019-6016-00008) has been revised. The test is now required no later than ninety (90) days after the first day of operation after issuance of Part 70 Operating Permit Renewal (T089-26989-00008).

Change No. 20:

- (a) Testing requirements pursuant to Part 70 Operating Permit (T019-6016-00008) which have been met will not be included in this Part 70 Operating Permit Renewal (T019-26989-00008). Therefore, original Condition D.2.7(b) has been revised to remove the requirement to test for the units that have met the requirement. The following table documents which emissions units have met the testing requirements of original Condition D.2.7(b).

Processes	Control Device ID	Pollutants to test	Date of Test	Compliance Status
warehouse conveyor system (EU74)	baghouse 249	PM	03/02/2005	In
south reclaim clinker covered conveyor (EU124)	baghouse 120	PM	05/05/2004	In
2D finish mill clinker bin transfer (EU44) and gypsum elevator (EU135)	baghouse 120	PM	03/10/2005	In
2D finish mill roll press circuit (EU46) and 2D finish mill clinker / gypsum feed circuit (EU45)	baghouses 261, 262, and 263	PM and PM ₁₀	03/01/2005	In
2D finish mill circuit (EU47)	baghouse 139	PM	03/05/2005	In
Elevators (2) (EU37) 2A finish mill circuit (EU39)	baghouse 134	PM	03/09/2005	In
Sidewinder (EU15)	baghouse 247	PM	04/25/2005	In
Blend silo #2 (EU17)	baghouse 230	PM	03/04/2005	In
Base tank (EU146)	baghouse 143	PM	04/06/2005	In

Processes	Control Device ID	Pollutants to test	Date of Test	Compliance Status
calibration system (EU18)	baghouse 212	PM	03/07/2005	In

- (b) In order to demonstrate compliance with 326 IAC 6.5-1-2, original Condition D.2.7(b) required PM testing for EU124 and EU41. As part of this permitting action, it has been determined that EU124 and EU41 are not subject to the requirements of 326 IAC 6.5-1-2. Therefore, the testing requirement has been removed.
- (c) The CKD sales loadout spout for CKD destined for sale and/or reuse into the process (EU154) is subject to a PM limit of 0.03 grains per dry standard cubic foot (dscf) of exhaust air under 326 IAC 6.5-1-2. However the manufacturer's specifications for the baghouse, submitted as part of Part 70 Operating Permit T019-6016-00008, specified 0.04 grains per dry standard cubic foot (dscf) of exhaust air. Additionally, the CKD sales loadout spout for CKD destined for sale and/or reuse into the process (EU154) is subject to a PM₁₀ limitation of 0.69 lbs/hr, necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable. However, the potential to emit PM₁₀ after controls (baghouse 265) is 0.82 lbs/hr.

Therefore, IDEM OAQ has determined that testing for PM and PM₁₀ for the CKD sales loadout spout for CKD destined for sale and/or reuse into the process (EU154), contained in original Condition D.2.7(b), is necessary in order to demonstrate compliance with 326 IAC 6.5-1-2 and 326 IAC 2-2 (Prevention of Significant Deterioration). IDEM, OAQ recognized that that market demands drive the necessity to operate the CKD sales loadout spout for CKD destined for sale and/or reuse into the process (EU154). Therefore, the requirement to test within 180 days after issuance of Part 70 Operating Permit (T019-6016-00008) has been revised. The test is now required no later than ninety (90) days after the first day of operation after issuance of Part 70 Operating Permit Renewal (T089-26989-00008).

- (d) The following baghouse control configuration was documented as part of the Part 70 Operating Permit T019-6016-00008 permitting action:

	501-Silos 30-44 (EU54)	BIC mixer (EU55) & BIC packer (EU56)
246, 150, 151	x	--
224	x	--
225	x	--
226	--	x

This TV Operating Permit Renewal T019-26989-00008 will modify the baghouse configuration by removing baghouse 226, routing the emissions from EU55 and EU56 to the existing baghouses 224 and 225, and incorporating the bag flattener.

	501-Silos 30-44 25 30-44 (EU54)	Bag Flattener (EU156)	BIC mixer (EU55) & BIC packer (EU56)
246, 150, 151	x	--	--
224	x	--	x
225	x	x	x
226	--	--	--

As part of the Part 70 Operating Permit: T019-6016-00008 permitting action, testing was not required for any of the five baghouses (224, 225, 245, 150, 151) controlling emissions from the 14 silos.

Based on the proposed baghouse control configuration, baghouse 225 is controlling considerably greater emissions than when initially evaluated. Additionally the application for AA 019-31272-00008, documented an outlet grain loading of 0.04 grains per dry standard cubic foot (dscf) for baghouse 225 and the Bag Flattener (EU156) is subject to an emission limitation under 326 IAC 6.5-1-2 of 0.03 grains per dry standard cubic foot (dscf). In order to determined compliance with the 326 IAC 6.5-1-2 PM limitation for EU156 testing is required for baghouse 225.

Change No. 21:

Original Condition D.3.2 - Particulate Matter (PM) [326 IAC 6.5-1-2] [326 IAC 2-7-6(3)] [326 IAC 2-7-15], has been separated into the following three (3) new Conditions: Condition D.3.1 - Prevention of Significant Deterioration (PSD) Minor Limit for PM and PM₁₀ [326 IAC 2-2], Condition D.3.3 - Particulate Matter (PM) [326 IAC 6.5-1-2], and Condition D.3.4 - Particulate Emissions [326 IAC 6-3-2]. Original Condition D.3.3 - Particulate Matter (PM) [326 IAC 6.5-2-4] is now Condition D.3.2.

Additionally, the combined particulate emissions limitation (326 IAC 6.5-2.4) from kiln #2 no longer includes emissions from the elevator/dust tank (EU28). EU28 receives cement dust from baghouse EU27, which controls emissions from kiln #2. Therefore, the particulate emissions from EU28 are not considered part of kiln #2 emissions, rather emissions generated from the handling of baghouse dust.

Change No. 22:

Original Condition D.3.10(a) - Testing Requirements (now D.3.8(a)) has been revised to remove the testing requirements for the kiln #2 coal dust silo (EU149), kiln #2 coal weigh system (EU150), and kiln #2 coal handling system (EU151) for PM. The testing was required for the purpose of demonstrating compliance with the 326 IAC 6.5-1-2 emission limitation of 0.03 grains per dry standard cubic foot (dscf) of exhaust air. These emission units are no longer subject to the 326 IAC 6.5-1-2 emission limitation.

Change No. 23:

Original Condition D.3.12(a) - Sulfur Dioxide Emissions and Sulfur Content (now D.3.10(a)) specified the procedures by which coal shall be sampled and analyzed. New Condition D.3.10(a)(3), which allows the heat content of the coal samples to be analyzed using ASTM D5865, in lieu of the methods called out in 326 IAC 3-7-2(d) has been added to the permit. Original Condition D.3.12 has been revised as follows:

D.3.12 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]

- (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), and (e). †
or
- (2) Sample and analyze 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) Pursuant to 326 IAC 3-7-2(f), in lieu of the requirements of 326 IAC 3-7-2(d) the source may elect to determine the heat content of coal samples in accordance with the procedures specified in ASTM D5865.**
 - ~~(3)~~**(4)** Sample and analyze the coal pursuant to 326 IAC 3-7-3. †~~or~~

* * *

Recommendation

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

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

An application for the purposes of this review was received on September 15, 2008.

Conclusion

The operation of this stationary portland cement plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T019-26989-00008.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jenny Acker at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9327 or toll free at 1-800-451-6027 extension 3-9327.

- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
PM/PM-10 Emissions From Uncontrolled Material Handling
 (page 1 of 2)

Company Name: Essroc Cement Corporation
Company Address: 301 Highway 31, Speed Indiana 47172-1305
Part 70 Operating Permit Renewal No.: 019-26989-00008
Reviewer: Jenny Acker
Date: 5-Jan-12

EU Number	EU Description	Throughput		Material	Emission Factor		Uncontrolled PM Emissions	
		Max	Units		PM (lb/ton material)	Source	(lb/hr)	(ton/yr)

Quarry Operations

EU01	Quarry Drilling Holes	38,000	hole/yr	limestone, clay, overburden	1.3	1	--	24.70
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Loesche (Raw) Mill Facilities

EU13	Todd Furnace	55	MMBtu/hr	fuel oil #2	0.0236	6	1.30	5.69
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Fossil Fuel Storage and Handling Facilities

EU64	Coal Transfer Tower	200	ton/hr	coal	0.0004	4	0.07	0.33
EU65	Coal Bin	200	ton/hr	coal	0.0004	4	0.07	0.33

Kiln #1 Clinker Handling Facilities

EU114	Clinker Can #1	100	ton/hr	clinker	0.3034	7	30.34	132.87
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Kiln #2 Clinker Handling Facilities

EU30	Clinker Drag Conveyor	150	ton/hr	clinker	0.3034	7	45.50	199.31
EU120	Clinker Can #2	150	ton/hr	clinker	0.3034	7	45.50	199.31

Clinker Handling to Crane Storage Facilities

EU32	N. Clinker trnsfr tower	200	ton/hr	clinker	0.3034	7	60.67	265.75
EU34	N. reclaim clinker covered conveyor	200	ton/hr	clinker	0.3034	7	60.67	265.75

Finish Product 506 - Silos Storage, Packing, and Bulk Loading Facilities

EU57	Bulk loading station	200	ton/hr	lime/pigment/clinker	0.3034	7	60.67	265.75
EU58	Bulk loading station	200	ton/hr	cement	0.3034	7	60.67	265.75
EU59	Packer #1 for Loading Cement	45	ton/hr	cement	0.3034	7	13.65	59.79
EU60	Packer #2 for Loading Cement	45	ton/hr	cement	0.3034	7	13.65	59.79
EU61	Packer #3for Loading Cement	45	ton/hr	cement	0.3034	7	13.65	59.79

Finish Product 504 -Silos Storage and Bulk Loading Facilities

*EU153	504 - Silo Bank f/CKD Sales	200	ton/hr	CKD	0.3034	7	60.67	265.75
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* The capacity of 200 tph is a conservative value based on the the north reclaim clinker conveyor system, which transfer clinker to the 2D finish mill at a rate of 200 tph.

Appendix A: Emissions Calculations
PM/PM-10 Emissions From Uncontrolled Material Handling
 (page 2 of 2)

Finish Product 502-Silos Storage and Bulk Loading Facilities

EU50	502 - Silos 1, 2, & 7-11	167	ton/hr	cement	0.3034	7	50.66	221.90
EU45	trnsfr to feed belts	140	ton/hr	cement	0.3034	7	42.47	186.02
EU45	trnsfr to scales	140	ton/hr	cement	0.3034	7	42.47	186.02
EU45	trnsfr to feed belts	140	ton/hr	cement	0.3034	7	42.47	186.02

EU45 Totals: 127.41 558.07

Emission Factor Source

1. AP-42, 5th Edition, Table 11.9-4 - Factor for Overburden
2. AP-42, 5th Edition, Table 11.2-2 - Factor for Uncontrolled Tertiary Crushing
3. AP-42, 5th Edition, Sec. 13.2.4; 0.7% moisture assumed; no enclosure efficiency assumed (see calc below)
4. AP-42, 5th Edition, Sec. 13.2.4; assume 12% moisture (see calc below)
5. AP-42, 5th Edition, Sec. 13.2.4; assume 14% moisture; assume no enclosure efficiency (see calc below)
6. AP-42, 5th Edition, Sec. 1.3, Tables 1.3-1 & 2
7. AP-42, 5th Edition, Sec. 13.2.4; assume 0.1% moisture (see calc below)
8. AP-42, 5th Edition, Sec 11.12 - Factor for Cement Unloading to Silo (pneumatic)
9. AP-42, 5th Edition, Sec 11.12 - Factor for Mixer Loading

Calculation Associated with AP-42, 5th Edition, Section 13.2.4

$$E = k(0.0032) * ((U/5)^{1.3})/((M/2)^{1.4})$$

where E = Emission factor (lb/ton of material throughput)
 k = 0.74 PM (particle size multiplier)
 k = 0.35 PM10 (particle size multiplier)
 U = 8.3 mile/hr mean wind speed
 M = % material moisture content
 CE = % control efficiency

Source	Moisture Content	Control Efficiency	PM Emission Factor
3	0.7%	0%	0.0199
7	0.1%	0%	0.3034
4	12%	0%	0.0004
5	14%	0%	0.0003

Appendix A: Emissions Calculations
PM/PM-10 Emissions from Baghouses
(page 1 of 3)

Company Name: Essroc Cement Corporation
Company Address: 301 Highway 31, Speed Indiana 47172-1305
Part 70 Operating Permit Renewal No.: 019-26989-00008
Reviewer: Jenny Acker
Date: 5-Jan-12

Baghouse ID	Emission Units Controlled	Grain Loading (gr/dscf)	Flow Rate (acfm)	Controlled PM/PM10		Control Eff. (%)	Uncontrolled PM/PM10	
				(lbs/hr)	(ton/yr)		(lbs/hr)	(ton/yr)
15	EU13 / EU14 / EU27	No Data Available		--	--	--	--	--
16	EU27	No Data Available		--	--	--	--	--
17	EU29	0.02	165,500	28.37	124.27	99.8%	14,186	62,133
101	EU06	0.04	6,000	2.06	9.01	99.8%	1,029	4,505
102	EU07	0.04	6,000	2.06	9.01	99.8%	1,029	4,505
120	EU135 / EU44	0.04	6,000	2.06	9.01	99.8%	1,029	4,505
131	EU35	0.04	4,300	1.47	6.46	99.8%	737	3,229
133	EU37 / EU38	0.04	9,000	3.09	13.52	99.8%	1,543	6,758
134	EU39	0.04	9,000	3.09	13.52	99.8%	1,543	6,758
135	EU40 / EU132	0.04	25,000	8.57	37.54	99.8%	4,286	18,771
136	EU41	0.04	25,000	8.57	37.54	99.8%	4,286	18,771
137	EU42 / EU132	0.04	27,000	9.26	40.55	99.8%	4,629	20,273
138	EU43	0.04	27,000	9.26	40.55	99.8%	4,629	20,273
¹⁾ 139	EU47	0.02	15,000	2.57	11.26	98.0%	129	563
143	EU146	0.04	5,000	1.71	7.51	99.8%	857	3,754
144	EU48	0.01	8,500	0.73	3.19	99.8%	364	1,596
146	EU49	No Data Available		--	--	--	--	--
148	EU50	No Data Available		--	--	--	--	--
149	EU50	No Data Available		--	--	--	--	--
150	EU54	No Data Available		--	--	--	--	--
¹⁾ 151	EU54	0.04	8,580	2.94	12.88	99.8%	1,471	6,442
152	EU52	0.03	2,500	0.64	2.82	99.8%	321	1,408
¹⁾ 153	EU51	0.04	4,700	1.61	7.06	99.8%	806	3,529
¹⁾ 154	EU51	0.04	7,600	2.61	11.41	99.8%	1,303	5,707
¹⁾ 155	EU51	0.04	4,110	1.41	6.17	99.8%	705	3,086
¹⁾ 156	EU51	0.04	4,600	1.58	6.91	99.8%	789	3,454
159	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
160	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
161	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
162	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
163	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
164	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502

Appendix A: Emissions Calculations
PM/PM-10 Emissions from Baghouses
(page 2 of 3)

Baghouse ID	Emission Units Controlled	Grain Loading (gr/dscf)	Flow Rate (acfm)	Controlled PM/PM10		Control Eff. (%)	Uncontrolled PM/PM10	
				(lbs/hr)	(ton/yr)		(lbs/hr)	(ton/yr)
165	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
166	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
167	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
168	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
169	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
170	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
171	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
172	EU53	0.01	8,000	0.69	3.00	99.8%	343	1,502
173	EU59	No Data Available		--	--	--	--	--
174	EU60	No Data Available		--	--	--	--	--
175	EU61	No Data Available		--	--	--	--	--
176	EU57	No Data Available		--	--	--	--	--
177	EU58	No Data Available		--	--	--	--	--
200	EU02	0.04	6,700	2.30	10.06	99.8%	1,149	5,031
202	EU124							
201	EU03 / EU04 / EU05	0.04	30,000	10.29	45.05	99.8%	5,143	22,526
206	EU63	0.04	3,600	1.23	5.41	99.8%	617	2,703
207	EU64	No Data Available		--	--	--	--	--
208	EU65	No Data Available		--	--	--	--	--
209	EU19	0.02	2,600	0.45	1.95	99.8%	223	976
210	EU21	0.04	2,400	0.82	3.60	99.8%	411	1,802
211	EU16	0.04	9,360	3.21	14.06	99.8%	1,605	7,028
212	EU18	0.04	6,250	2.14	9.39	99.8%	1,071	4,693
217	EU23	0.04	5,000	1.71	7.51	99.8%	857	3,754
218	EU25 / EU119 / EU24	0.04	4,800	1.65	7.21	99.8%	823	3,604
221	EU66 / EU68 / EU20	0.04	9,360	3.21	14.06	99.8%	1,605	7,028
222	EU22	0.02	165,500	28.37	124.27	99.8%	14,186	62,133
224	EU54 / EU55 / EU56	No Data Available		--	--	--	--	--
225	EU54 / EU55 / EU56	No Data Available		--	--	--	--	--
227	EU08 / EU09	0.04	15,000	5.14	22.53	99.8%	2,571	11,263
228	EU10 / EU11 / EU107 / EU108	0.04	5,000	1.71	7.51	99.8%	857	3,754
230	EU17	0.04	13,500	4.63	20.27	99.8%	2,314	10,137
231	EU26	0.04	3,000	1.03	4.51	99.8%	514	2,253
232	EU28	0.04	4,200	1.44	6.31	99.8%	720	3,154
234	EU31	0.04	7,100	2.43	10.66	99.8%	1,217	5,331

Appendix A: Emissions Calculations
PM/PM-10 Emissions from Baghouses
(page 3 of 3)

Baghouse ID	Emission Units Controlled	Grain Loading (gr/dscf)	Flow Rate (acfm)	Controlled PM/PM10		Control Eff. (%)	Uncontrolled PM/PM10	
				(lbs/hr)	(ton/yr)		(lbs/hr)	(ton/yr)
233	EU30	No Data Available		--	--	--	--	--
¹⁾ 242	EU62	0.04	5,000	1.71	7.51	99.8%	857	3,754
¹⁾ 246	EU54	0.04	5,000	1.71	7.51	99.8%	857	3,754
247	EU15	0.04	2,330	0.80	3.50	99.8%	399	1,749
249	EU74	0.04	1,650	0.57	2.48	99.8%	283	1,239
252	EU67 / EU69	0.02	1,740	0.30	1.31	99.8%	149	653
253	EU149	0.04	2,700	0.93	4.05	99.8%	463	2,027
254	EU150	0.04	500	0.17	0.75	99.8%	86	375
255	EU151	0.04	200	0.07	0.30	99.8%	34	150
261	EU46	0.04	18,300	6.27	27.48	99.8%	3,137	13,741
264	EU153	No Data Available		--	--	--	--	--
265	EU154	0.04	2,400	0.82	3.60	99.8%	411	1,802
266	EU155	0.04	800	0.27	1.20	99.8%	137	601
31382	EU114 / EU120	No Data Available		--	--	--	--	--
31495	EU35	0.04	47,000	16.11	70.58	99.8%	8,057	35,290
31496	EU35	No Data Available		--	--	--	--	--
31497	EU45	No Data Available		--	--	--	--	--
31498	EU45	No Data Available		--	--	--	--	--
31499	EU124	No Data Available		--	--	--	--	--
35134	EU09	0.03	2,000	0.51	2.25	99.8%	257	1,126
35137	EU09	0.03	2,000	0.51	2.25	99.8%	257	1,126
35363	EU10 / EU11 / EU12 / EU107 / EU108	0.03	1,250	0.32	1.41	99.8%	161	704
35925	EU25 / EU32	No Data Available		--	--	--	--	--
35927	EU34	No Data Available		--	--	--	--	--
35931	EU33 / EU123	0.04	2,800	0.96	4.20	99.8%	480	2,102
36643	EU45 / EU47	No Data Available		--	--	--	--	--
DC35990	EU46	No Data Available		--	--	--	--	--
DC35997	EU46	No Data Available		--	--	--	--	--
drilling rig baghouse 01	EU01	No Data Available		--	--	--	--	--

¹⁾ Baghouse specifications (acfm and control efficiency) from T019-6016-00008 application, the grain loading (gr/dscf) assumed to be 0.04, worst known of existing baghouses. This approach is reasonable, even when taking into account the age of the permit application, since the baghouses can not be replaced with anything but a similar baghouse without submitting an application.

Methodology:

Controlled PTE PM/PM10 (lb/hr) = air flow (acfm) * loading (grain/dscf) * 60 (min/hr) * 1/7000 (gr/lb)

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

Uncontrolled PTE PM/PM10 (lb/hr) = controlled PTE PM/PM10 (lb/hr) / (1- Control Eff.)

Uncontrolled PTE PM/PM10 (tpy) = Uncontrolled PTE (tpy) / (1- Control Eff)

Appendix A: Emissions Calculations
CAM Applicability Determination
 (page 2 of 3)

Emission Unit	Baghouse ID	Source	Controlled PM	Controlled PM	Control Eff. (%)	Uncontrolled PM	
			(lbs/hr)	(ton/yr)		(lbs/hr)	(ton/yr)
EU37	133	Baghouse Calc	3.09	13.52	99.8%	1,542.86	6,757.71
EU38	133	Baghouse Calc	3.09	13.52	99.8%	1,542.86	6,757.71
EU39	134	Baghouse Calc	3.09	13.52	99.8%	1,542.86	6,757.71
EU40	135	Baghouse Calc	8.57	37.54	99.8%	4,285.71	18,771.43
EU41	136	Baghouse Calc	8.57	37.54	99.8%	4,285.71	18,771.43
EU42	137	Baghouse Calc	9.26	40.55	99.8%	4,628.57	20,273.14
EU43	138	Baghouse Calc	9.26	40.55	99.8%	4,628.57	20,273.14
EU44	120	Baghouse Calc	2.06	9.01	99.8%	1,028.57	4,505.14
EU45	31497		--	--	--	--	--
	31498	PTE PM Calc	12.74	55.81	90.0%	127.41	558.07
	36643		--	--	--	--	--
EU46	261	Baghouse Calc	6.27	27.48	99.8%	3,137.14	13,740.69
	DC35990	No Data Available	--	--	--	--	--
	DC35997	No Data Available	--	--	--	--	--
EU47	139	Baghouse Calc	2.57	11.26	98.0%	128.57	563.14
	36643	No Data Available	--	--	--	--	--
EU48	144	Baghouse Calc	0.73	3.19	99.8%	364.29	1,595.57
EU49	146	No Data Available	--	--	--	--	--
EU50	148, 149	PTE PM Calc	5.07	22.19	90.0%	50.66	221.90
EU51	153	Baghouse Calc	1.61	7.06	99.8%	805.71	3,529.03
	154	Baghouse Calc	2.61	11.41	99.8%	1,302.86	5,706.51
	155	Baghouse Calc	1.41	6.17	99.8%	704.57	3,086.02
	156	Baghouse Calc	1.58	6.91	99.8%	788.57	3,453.94
EU52	152	Baghouse Calc	0.64	2.82	99.8%	321.43	1,407.86
	159	Baghouse Calc	1.61	7.06	99.8%	805.71	3,529.03
	160	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	161	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	162	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	163	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	164	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	165	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	166	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	167	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	168	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	169	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	170	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
	171	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71
172	Baghouse Calc	0.69	3.00	99.8%	342.86	1,501.71	
EU54	150	No Data Available	--	--	--	--	--
	151	Baghouse Calc	2.94	12.88	99.8%	1,470.86	6,442.35
	224	No Data Available	--	--	--	--	--
	225	No Data Available	--	--	--	--	--
	246	Baghouse Calc	1.71	7.51	99.8%	857.14	3,754.29
EU55	224	No Data Available	--	--	--	--	--
	225	No Data Available	--	--	--	--	--
EU56	224	No Data Available	--	--	--	--	--
	225	No Data Available	--	--	--	--	--
EU57	176	PTE PM Calc	6.07	26.57	90.0%	60.67	265.75
EU58	177	PTE PM Calc	6.07	26.57	90.0%	60.67	265.75
EU59	173	PTE PM Calc	1.37	5.98	90.0%	13.65	59.79
EU60	174	PTE PM Calc	1.37	5.98	90.0%	13.65	59.79
EU61	175	PTE PM Calc	1.37	5.98	90.0%	13.65	59.79
EU62	242	Baghouse Calc	1.71	7.51	99.8%	857.14	3,754.29
EU63	206	Baghouse Calc	1.23	5.41	99.8%	617.14	2,703.09
EU64	207	PTE PM Calc	0.01	0.03	90.0%	0.07	0.33

Appendix A: Emissions Calculations
CAM Applicability Determination
(page 3 of 3)

Emission Unit	Baghouse ID	Source	Controlled PM	Controlled PM	Control Eff. (%)	Uncontrolled PM	
			(lbs/hr)	(ton/yr)		(lbs/hr)	(ton/yr)
EU65	208	PTE PM Calc	0.01	0.03	90.0%	0.07	0.33
EU66	221	Baghouse Calc	3.21	14.06	99.8%	1,604.57	7,028.02
EU67	252	Baghouse Calc	0.30	1.31	99.8%	149.14	653.25
EU68	221	Baghouse Calc	3.21	14.06	99.8%	1,604.57	7,028.02
EU69	252	Baghouse Calc	0.30	1.31	99.8%	149.14	653.25
EU74	249	Baghouse Calc	0.57	2.48	99.8%	282.86	1,238.91
EU107	35363	Baghouse Calc	0.32	1.41	99.8%	160.71	703.93
	228	Baghouse Calc	1.71	7.51	99.8%	857.14	3,754.29
EU108	35363	Baghouse Calc	0.32	1.41	99.8%	160.71	703.93
	228	Baghouse Calc	1.71	7.51	99.8%	857.14	3,754.29
EU114	31382	PTE PM Calc	3.03	13.29	90.0%	30.34	132.87
EU119	218	Baghouse Calc	1.65	7.21	99.8%	822.86	3,604.11
EU120	31382	PTE PM Calc	4.55	19.93	90.0%	45.50	199.31
EU123	35931	Baghouse Calc	0.96	4.20	99.8%	480.00	2,102.40
EU124	31499	No Data Available	--	--	--	--	--
	202	No Data Available	--	--	--	--	--
EU132	135	Baghouse Calc	8.57	37.54	99.8%	4,285.71	18,771.43
	137	Baghouse Calc	9.26	40.55	99.8%	4,628.57	20,273.14
EU135	120	Baghouse Calc	2.06	9.01	99.8%	1,028.57	4,505.14
EU146	143	Baghouse Calc	1.71	7.51	99.8%	857.14	3,754.29
EU149	253	Baghouse Calc	0.93	4.05	99.8%	462.86	2,027.31
EU150	254	Baghouse Calc	0.17	0.75	99.8%	85.71	375.43
EU151	255	Baghouse Calc	0.07	0.30	99.8%	34.29	150.17
EU153	264	PTE PM Calc	6.07	26.57	90.0%	60.67	265.75
EU154	265	Baghouse Calc	0.82	3.60	99.8%	411.43	1,802.06
EU155	266	Baghouse Calc	0.27	1.20	99.8%	137.14	600.69

**Appendix A: Emissions Calculations
326 IAC 6-3-2 Applicability Determination**

Company Name: Essroc Cement Corporation
Company Address: 301 Highway 31, Speed, IN 47172
Part 70 Operating Permit Renewal No.: 019-26989-00008
Reviewer: Jenny Acker
Date: 5-Jan-12

Process or Emission Unit	Emission Unit ID	Subject to 6-3-2 via permit #	Issuance Date	Process Weight Rate (P) (tph)	Emission Limitation (E)
clinker handling @ cooler & trnsfr twr	EU28, EU24	10-03-87-0177	6-7-1983	100	
Flyash Storage silo	EU10	10-03-87-0180	6-7-1983	300	
clinker handling trnsfr twr across Muddy Frok	EU25, EU32, EU34	10-03-87-0181	6-7-1983	200	
primary jaw crusher & secondary hydrone crusher	EU02	10-03-91-0240	12-28-1989	1050	
tertiary impact crusher	EU04	10-03-91-0240	12-28-1989	350	
2 LS storage bins	EU06, EU07	10-03-91-0240	12-28-1989	700	
LS tunnel & Loesche mill feed belt	EU08, EU09	10-03-91-0241	12-28-1989	75	
Loesche mill	EU14	10-03-91-0241	12-28-1989	300	
blend silo	EU17	10-03-91-0241	12-28-1989	300	
transfer pump	EU15	10-03-91-0241	12-28-1989	300	
clinker handling	EU23	10-03-91-0245	12-28-1989	100	
<u>Finish Material Grinding Process</u>					
clinker withdraw & crushing	EU132, EU135, EU44, EU35, EU124	10-03-91-0248	12-28-1989	200	
four mill systems	EU38, EU37, EU39 EU40, EU41, EU42 EU43, EU47	10-03-91-0248	12-28-1989	140	
2 storage tanks	EU146, EU48	10-03-91-0248	12-28-1989	700	
blending system	EU49	10-03-91-0248	12-28-1989	50	
<u>Bulk Packing & Loading</u>					
50 storage silos	EU50, EU54, EU51 EU53, EU153	10-03-91-0249	12-28-1989	200	
bulk loading	EU52, EU57, EU58	10-03-91-0249	12-28-1989	200	
packing system	EU59, EU60, EU61	10-03-91-0249	12-28-1989	45	
BIC west	EU54	10-03-91-0249	12-28-1989	45	
bag cleaning	EU55, EU56	10-03-91-0249	12-28-1989	45	
bag cleaning	EU62, EU74	10-03-91-0249	12-28-1989	45	
coal mill	EU67	CP 019-5259-00008	3-28-1996	14	
coal storage bin	EU149	CP 019-5259-00008	3-28-1996	14	
coal weight system	EU150	CP 019-5259-00008	3-28-1996	14	
coal handling system	EU151	CP 019-5259-00008	3-28-1996	14	
roller press for 2D Finish	EU46	CP 019-9349-00008	10-27-1998	140	
grinding	Insignificant Activities	CP 019-9349-00008	10-27-1998	varies	

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

Company Name: Essroc Cement Corporation
Company Address: 301 Highway 31, Speed, IN 47172
Part 70 Operating Permit Renewal No.: 019-26989-00008
Reviewer: Jenny Acker
Date: 5-Jan-12

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO (Published Aug 31, 1983)	NSPS Subpart Y (Published Oct 24, 1974)	NSPS Subpart F (Published Aug 17, 1971)	NESHAP Subpart LLL Prior to 09/09/2013 (Published June 14, 1999)	NESHAP Subpart LLL On & After 09/09/2013 (Published June 14, 1999)
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Quarry activities

quarry drilling	EU01	1982	pre-dates rule	no, not affected facility	not affected facilities	no, not affected facility	no, not affected facility
quarry blasting	EU75	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
raw matl loading	EU76	1948	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility

Raw Material Stockpile Operations

raw material unloading to stockpile	EU78	1948	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
strippings stockpile	EU145	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck unloading to additive hopper	EU99	1948	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
silica/alumina/iron storage pile	EU100	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
additive clay blend pile	EU101	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck unloading to clay storage piles	EU102	1948	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
uncovered clay storage pile	EU103	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
covered clay storage pile	EU104	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility

Raw Material Sizing Operations

Raw material unloading to crusher	EU80	pre-1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
stone surge pile	EU81	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
primary crusher	EU82	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
covered conveyor (transfers stone)	EU83	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
screens	EU84	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
secondary crusher	EU02	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
covered conveyor (transfers stone)	EU03	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
tertiary crushers (2)	EU04	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
conveyor (transfers stone)	EU05	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
covered conveyor (transfers stone)	EU85	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
traveling belt (transfers stone)	EU86	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
north stone bin	EU06	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
south stone bin	EU07	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
stone conveyor transfer to truck	EU87	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck unloading (crushed limestone)	EU89	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck loading (crushed limestone)	EU91	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck unloading	EU93	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck unloading (limestone)	EU94	1956	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
crushed limestone storage piles	EU90	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
emergency limestone storage piles	EU95	pre-1945	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
truck dump hopper	EU96	1977	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
limestone conveyor	EU97	1977	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility
limestone storage pile	EU98	1957	pre-dates rule	not affected facilities	not affected facilities	no, not affected facility	no, not affected facility

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

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart 000 (Published Aug 31, 1983)	NSPS Subpart Y (Published Oct 24, 1974)	NSPS Subpart F (Published Aug 17, 1971)	NESHAP Subpart LLL Prior to 09/09/2013 (Published June 14, 1999)	NESHAP Subpart LLL On & After 09/09/2013 (Published June 14, 1999)
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Kiln #1 Cement Kiln Dust (CKD) Operations

dust tank system - CKD	EU21	1971	not affected facilities				
truck loading from BH 221	EU113	1971	not affected facilities				
CKD storage pile	EU118	1945	not affected facilities				
CKD loadout spout - EU21	EU155	1966	not affected facilities				
elevator/dust tank	EU28	1977	not affected facilities				

Kiln #2 Cement Kiln Dust (CKD) Operations

truck loading from elevator dust tank	EU115	1977	not affected facilities				
truck loading from BH (alkali bypass)	EU117	1977	not affected facilities				

Miscellaneous Facilities

warehouse conveyor system	EU74	1985	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
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Clay Processing Operations

clay hopper	EU105	pre-1945	not affected facilities	not affected facilities	pre-dates rule	yes	yes
covered conveyor system (clay)	EU106	pre-1954	not affected facilities	not affected facilities	pre-dates rule	yes	yes
clay crusher	EU08	1977	not affected facilities	not affected facilities	not affected facilities	yes	no

Finish Operations Crane Storage Facilities

emergency stone storage pile	EU128	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	no, not affected facility
truck unloading station	EU127	pre-1945	not affected facilities	not affected facilities	pre-dates rule	yes	yes
truck unloading station	EU129	pre-1945	not affected facilities	not affected facilities	pre-dates rule	yes	yes
crane storage building	EU131	pre-1945	not affected facilities	not affected facilities	pre-dates rule	yes	yes
gypsum storage piles	EU130	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	no, not affected facility
gypsum storage piles	EU134	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	no, not affected facility

Fossil Fuel Storage and Handling

truck unloading station (coal)	EU136	June, 1971	not affected facilities	pre-dates rule	not affected facilities	yes	yes
reserve coal storage pile	EU137	pre-1945	not affected facilities	pre-dates rule	not affected facilities	no, not affected facility	no, not affected facility
coal storage pile	EU142	pre-1945	not affected facilities	pre-dates rule	not affected facilities	no, not affected facility	no, not affected facility
coal draw-up covered conveyor	EU63	June, 1972	not affected facilities	pre-dates rule	not affected facilities	yes, transfer points only	yes, transfer points only
coal transfer tower	EU64	June, 1972	not affected facilities	pre-dates rule	not affected facilities	yes, transfer points only	yes, transfer points only
coal bin	EU65	June, 1972	not affected facilities	pre-dates rule	not affected facilities	yes	yes

Kiln #1 Clinker Handling Facilities

#1 clinker drag conveyor (clinker)	EU23	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
apron conveyor (clinker)	EU24	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
clinker can #1 (off-spec clinker)	EU114	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes

Kiln #2 Clinker Handling Facilities

kreyling hopper (clinker)	EU157	2009	not affected facilities	not affected facilities	will comply with LLL	yes	yes
#2 clinker drag conveyor (clinker)	EU30	1977	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
aumond conveyor (clinker)	EU31	1977	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
cross belt (clinker)	EU119	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
clinker can #2 (off-spec clinker)	EU120	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes

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

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart 000 (Published Aug 31, 1983)	NSPS Subpart Y (Published Oct 24, 1974)	NSPS Subpart F (Published Aug 17, 1971)	NESHAP Subpart LLL Prior to 09/09/2013 (Published June 14, 1999)	NESHAP Subpart LLL On & After 09/09/2013 (Published June 14, 1999)
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Clinker Handling to Crane Storage Facilities

long belt (clinker)	EU25	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
north clinker transfer tower	EU32	1972	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
covered incline belt (clinker)	EU33	1972	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
clinker storage pile	EU121	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	yes
north clinker storage pile	EU122	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	yes
north clinker storage building	EU123	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes
covered conveyor system (clinker)	EU34	1962	not affected facilities	not affected facilities	pre-dates rule	yes	yes
south reclaim clinker covered conveyor	EU124	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
truck loading station	EU125	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
truck unloading station	EU126	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes

2ABC Finish Mill Facilities

CKD/Lime tank	EU146	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
gypsum/stone transfer circuit	EU35	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
elevators	EU37	1969	not affected facilities	not affected facilities	pre-dates rule	yes	yes
finish mill feed belt	EU132	1977	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
2A hopper/preliminary ball mill	EU38	1948	not affected facilities	not affected facilities	pre-dates rule	yes	no, not affected facility
finish mill circuit 2A	EU39	1948	not affected facilities	not affected facilities	pre-dates rule	yes	yes
finish mill circuit 2B	EU40	1953	not affected facilities	not affected facilities	pre-dates rule	yes	yes
finish mill circuit 2C	EU42	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes
separator and cement cooler	EU43	1960/1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
separator and cement cooler	EU41	1953/1955	not affected facilities	not affected facilities	pre-dates rule	yes	yes
BP tank	EU48	1965	not affected facilities	not affected facilities	pre-dates rule	yes	yes
pump (from BP tank to silos)	EU49	1966	not affected facilities	not affected facilities	pre-dates rule	yes	yes

2D Finish Mill Facilities

gypsum elevator	EU135	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
2D finish mill clinker bin	EU44	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
finish mill clinker/gypsum feed circuit	EU45	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes
2D finish mill roll press circuit	EU46	1999	not affected facilities	not affected facilities	will comply with LLL	yes	yes
finish mill circuit 2D	EU47	1964	not affected facilities	not affected facilities	pre-dates rule	yes	yes

Finish Product 501-Silos Storage and Packing Facilities

501 silos	EU54	1965	not affected facilities	not affected facilities	pre-dates rule	yes	yes
BIC mixer (lime and pigment)	EU55	1973	not affected facilities	not affected facilities	will comply with LLL	yes	yes
BIC packer (loads cement bags)	EU56	1973	not affected facilities	not affected facilities	will comply with LLL	yes	yes

Finish Product 506-Silos Storage, Packing, and Bulk Loading Facilities

506 silos	EU53	1958	not affected facilities	not affected facilities	pre-dates rule	yes	yes
2 bulk loading stations	EU57-58	1954	not affected facilities	not affected facilities	pre-dates rule	yes	yes
packer #1	EU59	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes
packer #2	EU60	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes
packer #3	EU61	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes
bag compression station	EU62	1960	not affected facilities	not affected facilities	pre-dates rule	yes	yes

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

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart 000 (Published Aug 31, 1983)	NSPS Subpart Y (Published Oct 24, 1974)	NSPS Subpart F (Published Aug 17, 1971)	NESHAP Subpart LLL Prior to 09/09/2013 (Published June 14, 1999)	NESHAP Subpart LLL On & After 09/09/2013 (Published June 14, 1999)
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Finish Product 504-Silos Storage and Bulk Loading Facilities

504 silos	EU51	1959	not affected facilities	not affected facilities	pre-dates rule	yes	yes
bulk loading station (trucks and RR)	EU52	1959	not affected facilities	not affected facilities	pre-dates rule	yes	yes
504 silos - CKD Sales	EU153	1959	not affected facilities				
CKD Sales Loadout Spout - 504 Silos	EU154	1999	not affected facilities				

Finish Product 502-Silos Storage and Bulk Loading Facilities

502 silos	EU50	1966	not affected facilities	not affected facilities	pre-dates rule	yes	yes
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Raw Mill Facilities

pneumatic truck unloading stations	EU107 - EU108	July, 1976	not affected facilities	not affected facilities	will comply with LLL	yes	yes
hopper	EU109	July, 1976	not affected facilities	not affected facilities	will comply with LLL	yes	yes
bottom ash hopper	EU158	2009	not affected facilities	not affected facilities	will comply with LLL	yes	yes
additive bins equipped with 2 elevators	EU10-11	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
C-15 covered conveyor (clay)	EU09	1977	not affected facilities	not affected facilities	will comply with LLL	yes, transfer points only	yes, transfer points only
iron ore silo	EU12	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
Loesche raw mill	EU14	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
sidewinder (pneumatic transfer pump)	EU15	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
raw material pile	EU112	pre-1945	not affected facilities	not affected facilities	pre-dates rule	no, not affected facility	no, not affected facility
Todd furnace (for Loesche raw mill)	EU13	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
blend silo #1	EU16	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
blend silo #2	EU17	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
calibration system	EU18	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes

Coal Handling, Milling, and Storage Facilities

coal crusher mill #1	EU66	May, 1971	not affected facilities	pre-dates rule, exhausts to kiln	not affected facilities	no	no
coal crusher mill #2	EU67	1977	not affected facilities	yes	not affected facilities	no	no
fuel oil-fired air heater for kiln #1	EU68	May, 1971	not affected facilities	pre-dates rule, exhausts to kiln	not affected facilities	yes	yes
fuel oil-fired air heater for kiln #2	EU69	1977	not affected facilities	yes	not affected facilities	yes	yes
kiln #2 coal dust silo	EU149	1996	not affected facilities	will comply with LLL	not affected facilities	yes	yes
kiln #2 coal weigh system	EU150	1996	not affected facilities	will comply with LLL	not affected facilities	yes	yes
kiln #2 coal handling system	EU151	1996	not affected facilities	will comply with LLL	not affected facilities	yes	yes

The Kiln #1 and Kiln #2 Facilities

feed system for kiln #1	EU19	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
kiln #1	EU20	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
feed system for kiln #2	EU26	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
kiln #2	EU27	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes

Clinker Cooler #1 Facilities

cooler #1	EU22	May, 1971	not affected facilities	not affected facilities	pre-dates rule	yes	yes
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Clinker Cooler #2 Facilities

cooler #2	EU29	1977	not affected facilities	not affected facilities	will comply with LLL	yes	yes
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**Appendix A: Emissions Calculations
Exempt Unit (EU156)**

Company Name: Essroc Cement Corporation
Company Address: 301 Highway 31, Speed, IN 47172
Part 70 Operating Permit Renewal No.: 019-26989-00008
Reviewer: Jenny Acker
Date: February 8, 2012

1. Assumptions

Packing machine rate (maximum rate for EU55 & EU56)	45	tph
Annual hours of operation	8,760	hrs/yr
Maximum annual throughput	394,200	tpy
Density of portland cement	180.7	lbs/ft ³
Percent of void air removed with flattener	100	%
Packing machine dust collection efficiency	99.8	%
Packing machine dust collector out grain loading	0.04	gr/acf

2. Calculations

Bag Size (lbs)	Bag Dimensions (inches)			Bag Volume (ft ³)	Bags (#/yr)	Bag Cement Volume (ft ³)	Bag Void Volume	
	Length	Height	Width				(ft ³)	(ft ³ /yr)
70	14.0	18.5	4.5	0.67	11,262,857	0.39	0.29	3,233,529.8
75	14.0	18.5	4.5	0.67	10,512,000	0.42	0.26	2,727,092.3
80	14.0	18.5	4.5	0.67	9,855,000	0.44	0.23	2,283,959.5

Methodology

Bags (#/yr) = maximum throughput (ton/yr) x 2000 (lb/ton) x 1/bag size (lbs)
 Bag Cement Volume (ft³) = bag size (lbs) x 1/density of portland cement (lbs/ft³)
 Bag Void Volume (ft³) = bag volume (ft³) - bag cement volume (ft³)
 Bag Void Volume (ft³/yr) = bag void volume (ft³) x Bags (#/yr)

3. Emissions Summary

	PTE (Controlled Emissions) (tpy)				Uncontrolled Emissions (tpy)			
	PM	PM ₁₀	PM _{2.5}	Lead (Pb)	PM	PM ₁₀	PM _{2.5}	Lead (Pb)
	9.24E-03	3.82E-03	1.37E-03	4.62E-08	4.62	1.91	0.69	2.31E-05
	7.79E-03	3.22E-03	1.16E-03	3.90E-08	3.90	1.61	0.58	1.95E-05
	6.53E-03	2.70E-03	9.69E-04	3.26E-08	3.26	1.35	0.48	1.63E-05
Worst Case	9.24E-03	3.82E-03	1.37E-03	4.62E-08	4.62	1.91	0.69	2.31E-05

Methodology

PTE (tpy) PM = bag void volume (ft³/yr) x 0.04 (gr/acf) x 1/7000 (gr/lb) x 1/2000 (lb/ton)
 PTE (tpy) PM₁₀ = PTE PM (tpy) x 41.35 % (M₁₀/PM total) [where: 41.35% from Cement Concrete & Aggregates, Vol. 26, No. 2, 2004]
 PTE (tpy) PM_{2.5} = PTE PM (tpy) x 14.85 % (PM_{2.5}/PM total) [where: 41.35% from Cement Concrete & Aggregates, Vol. 26, No. 2, 2004]
 PTE (tpy) Lead = PTE PM (tpy) x 5 ppm (Lead/PM total) [Essroc testing (worst case) kiln 1, 2009]



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: June 28, 2012

RE: Essroc Cement Corp. / 019-26989-00008

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

TO: David Hitt
Essroc Cement Corp
301 Highway 31
Speed, IN 47172

DATE: June 28, 2012

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

SUBJECT: Final Decision
Part 70 Operating Permit Renewal
019-26989-00008

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Paul Stewart – Plant Manager
James Hauck – Hatchett & Hauck
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

June 28, 2012

TO: June 28, 2012

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

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

Applicant Name: Essroc Cement Corp.
Permit Number: 019-26989-00008

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

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2		Paul Stewart Plant Mgr ESSROC Cement Corp 301 Hwy 31 Speed IN 47172-1305 (RO CAATS)										
3		Mr. Bruce Rieger 4809 Bud Prather Road Sellersburg IN 47172 (Affected Party)										
4		Mr. Gordon K. Trainor 22417 Martinssburg Road Borden IN 47106 (Affected Party)										
5		Mr. Tim Lynch 315 Martin St Borden IN 47106 (Affected Party)										
6		Ms. Rhonda England 17213 Persimmon Run Rd Borden IN 47106-8604 (Affected Party)										
7		Rita Goedelher or Sadie Sansone 9402 New Market Road Charlestown IN 47111 (Affected Party)										
8		The Abell Family 216 Bates Drive Charlestown IN 47111 (Affected Party)										
9		Virginia & Hiram Abbott 9512 State Road 403 Charlestown IN 47111 (Affected Party)										
10		Ms. Lindsey Bertram 319 Locust Drive Charlestown IN 47111 (Affected Party)										
11		Ms. Rhonda Cole 175 Morningside Drive Charlestown IN 47111 (Affected Party)										
12		Mr. James D Cox 6817 Highway 403 Charlestown IN 47111 (Affected Party)										
13		Ms. Kristin Coy 1918 Vienna Road Charlestown IN 47111 (Affected Party)										
14		Mr. John Croucher Indiana Army Ammunition Place HWY 62 Charlestown IN 47111 (Affected Party)										
15		Mr. Michael Crum 5506 Salem Noble Rd Charlestown IN 47111 (Affected Party)										

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Mail Code 61-53

IDEM Staff	GHOTOPP 6/28/2012 ESSROC Cement Corp 019-26989-00008 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY		

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1		Boyd 2907 Highway 160 Charlestown IN 47111 (Affected Party)										
2		Mr. Aaron Daniels 13411 Highway 62 Charlestown IN 47111 (Affected Party)										
3		Mr. Jeffery A Day 108 Bates Drive Charlestown IN 47111 (Affected Party)										
4		Mr. Glen R. Sherlin Jr. 177 Morningside Drive Charlestown IN 47111 (Affected Party)										
5		Ms. Ira W. Shaw 6801 Old Bethany Road Charlestown IN 47111 (Affected Party)										
6		Ms. Meredith Sims 5410 Greenleaf Frive Charlestown IN 47111 (Affected Party)										
7		James & Janet Goodwin 6906 Salem-noble Rd. Charlestown IN 47111 (Affected Party)										
8		Mr. Michael Grayson 6940 Ridge Point Way Charlestown IN 47111 (Affected Party)										
9		Ms. Andrea Edens 3604 Crescent Road Charlestown IN 47111 (Affected Party)										
10		Mr. Joshua Emily 8507 Eagletrail Charlestown IN 47111 (Affected Party)										
11		Chris & Cassie Ziem 2103 Fulton Drive Charlestown IN 47111 (Affected Party)										
12		Louis & Joyce Weber 7812 Salem Noble Road Charlestown IN 47111 (Affected Party)										
13		George & Carol Haas 6712 Salem-Noble Rd Charlestown IN 47111 (Affected Party)										
14		Ms. Sarah Hall 1513 Seatick Road Charlestown IN 47111 (Affected Party)										
15		Robert & Tana Harris 7706 Stone Creek Court Charlestown IN 47111 (Affected Party)										

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Mail Code 61-53

IDEM Staff	GHOTOPP 6/28/2012 ESSROC Cement Corp 019-26989-00008 Final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204			

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Fred 7804 Lost Creek Trail Charlestown IN 47111 (Affected Party)										
2		Ms. Courtney Nash 6797 Quial Chase Charlestown IN 47111 (Affected Party)										
3		Ms. Lisa Nepier 206 west Drive Charlestown IN 47111 (Affected Party)										
4		Mr. Greg Portman, Jr. 380 High Street Charlestown IN 47111 (Affected Party)										
5		Mr. Steve Ramage, Jr. 8570 Lakewood Drive Charlestown IN 47111 (Affected Party)										
6		Ms. Kris Knight 3324 Jack Teeple Road Charlestown IN 47111 (Affected Party)										
7		Mr. Christopher Howard 191 Highway 160 Charlestown IN 47111 (Affected Party)										
8		Mr. Andrew Merriman 201 Church Street Charlestown IN 47111 (Affected Party)										
9		Paul & Chris Lenfert 5715 Highway 403 Charlestown IN 47111 (Affected Party)										
10		James A Lewis Indiana State Senator 774 Level Charlestown IN 47111 (Legislator)										
11		Mr. Clifford H. Schafer 9002 Stonemour way Charlestown IN 47111-9697 (Affected Party)										
12		Ms. Betty Hislip 602 Dartmouth Drive, Apt 8 Clarksville IN 47129 (Affected Party)										
13		Mr. Clifford B Ernst, Jr. 10577 North Skyline Drive Floyds Knobs IN 47119 (Affected Party)										
14		Ms. Lois Ham 4204 Fawn Ct. Floyds Knobs IN 47119-9650 (Affected Party)										
15		Julia Daughy 613 Lincoln Speed IN 47 (Affected Party)										

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1		Richard Dunaway 616 Lincoln Blvd. Sellersburg IN 47122 (Affected Party)										
2		Mrs. Sandy Banet 514 Haddox Rd Henryville IN 47126 (Affected Party)										
3		Mr. Ralph Guthrie Highway 160 East Henryville IN 47126 (Affected Party)										
4		Ms. Bernice Prall 16715 Beyl Road Henryville IN 47126 (Affected Party)										
5		J. C. McReynolds 3009 Speith Road Henryville IN 47126 (Affected Party)										
6		Ms. Thelma Guernsey 623 Lincoln Blvd. Sellersburg IN 47172 (Affected Party)										
7		Mr. James Hale 24 Maple Street Sellersburg IN 47172 (Affected Party)										
8		Ms. Danielle Cunningham 5903 Shurgate Road Jeffersonville IN 47130 (Affected Party)										
9		Eric & Kathy Cunningham 5403 Shurgate Rd Jeffersonville IN 47130 (Affected Party)										
10		Ms. Rachel Cunnisher 5403 shurgate Road Jeffersonville IN 47130 (Affected Party)										
11		Jeffersonville City Council and Mayors Office 500 Quarter Master Jeffersonville IN 47130 (Local Official)										
12		Mr. Mike Myer 1216 Akers Avenue Jeffersonville IN 47130 (Affected Party)										
13		Ms. Bonnie J Howell 1212 Birschwood Drive Jeffersonville IN 47130 (Affected Party)										
14		Mr. Edward Meyer 2608 Bennet Ave. Jeffersonville IN 47130 (Affected Party)										
15		Mr. Chris Myers 3208 Marion Court Louisville KY 40206 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Name and address of Sender	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204			

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1		Robert Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)										
2		Ms. Renee Butterworth Concerned Citizen Coalition 13500 Horncastle Way Louisville KY 40272-1326 (Affected Party)										
3		Ms. Maryann Carney 12001 Treloar Avenue Memphis IN 47143 (Affected Party)										
4		Mr. Lonnie Cooper 10312 Sticker Road Memphis IN 47143 (Affected Party)										
5		Mark & K. C. Cooper 10102 Sticker RD Memphis IN 47143 (Affected Party)										
6		Mr. BJ Steele 12512 Bennettsville Road Memphis IN 47143 (Affected Party)										
7		Mr. John Hamm, Sr 11714 Charlestown-Memphis Rd Memphis IN 47143 (Affected Party)										
8		Ms. Sharon Park 11011 Stricker Road Memphis IN 47143 (Affected Party)										
9		Mr. John Beyl 13251 Morning Mist Trail Memphis IN 47143 (Affected Party)										
10		Mr. Scott Ellis Cadence Environmental Inc. Cadence Park Plaza Michigan City IN 46360 (Affected Party)										
11		The Honorable Connie Sipes Indiana State Senate 1825 Edin Avenue New Albany IN 47150 (Legislator)										
12		Mr. Michael Wildt 1020 Falcon Ct. New Albany IN 47150-5463 (Affected Party)										
13		Ms. Jane Shinner PO Box 1224 New Albany IN 47151-1224 (Affected Party)										
14		Ms. Connie Dietrich 2515 Leon Prall Road Otisco IN 47163 (Affected Party)										
15		Mr. Paul F Garrett 9305 Henryville Otisco Road Otisco IN 47163 (Affected Party)										

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1		Stephanie 1007 Clapp Road Otisco IN 47163-9733 (Affected Party)										
2		Larena SwanCorya 5119 Bud Prather Sellersburg IN 47172 (Affected Party)										
3		Mr. John Popp 849 Dreyer Lane Sellersburg IN 47172 (Affected Party)										
4		Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
5		B G Adkins 617 Whitner Court Sellersburg IN 47172 (Affected Party)										
6		Benita & Ed Barczak PO Box H Sellersburg IN 47172 (Affected Party)										
7		Mr. Anthony W. Ahlluand 638 Pennsylvania Avenue Sellersburg IN 47172 (Affected Party)										
8		Robert & Sandra Carter 261 Shirley Avenue Sellersburg IN 47172 (Affected Party)										
9		Mr. Lindon Bland 337 S. Fern Street Sellersburg IN 47172 (Affected Party)										
10		Mr. Randy Bowling Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
11		Phillip & Kathy Combs 5102 Tunnel Mill Drive Charlestown IN 47172 (Consultant)										
12		Jeff & Lisa Burgess 221 Creek Road Sellersburg IN 47172 (Affected Party)										
13		Ms. Jessalene C. Smith 246 Ehringer Lane Sellersburg IN 47172 (Affected Party)										
14		Ms. Patricia Soeder 256 Kahl Court Sellersburg IN 47172 (Affected Party)										
15		Sellersburg Town Council 316 Utica Street Sellersburg IN 47172 (Local Official)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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1		Richard & Shirley 644 Florida Drive Sellersburg IN 47172 (Affected Party)										
2		Mr. Larry E. Thomas Silver Creek Juniot High Faculty 495 North Avenue Sellersburg IN 47172 (Affected Party)										
3		Mr. Ken Rush Sellersburg Stone Company, Inc. 1019 East Utica Street Sellersburg IN 47172 (Affected Party)										
4		Junita & Alfred Samples 316 Kahl CT Sellersburg IN 47172 (Affected Party)										
5		Carol & Charles Deaton 403 Allhands Avenue Sellersburg IN 47172 (Affected Party)										
6		Mr. William Wise 522 Linnwood Sellersburg IN 47172 (Affected Party)										
7		Ms. Lisa Goodwin 624 Allen RD Sellersburg IN 47172 (Affected Party)										
8		Mr. Rick Gordon 635 Forest Drive North Sellersburg IN 47172 (Affected Party)										
9		Don & Carol Dooley 24 LaSalle St Sellersburg IN 47172 (Affected Party)										
10		Mr. Philip D Downey Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
11		Mr. Richard Eve Sr. PO Box 27 Sellersburg IN 47172-0027 (Affected Party)										
12		Ms. Linda Everage 4024 Perry Crossing Rd Sellersburg IN 47172 (Affected Party)										
13		Mr. Tony Grider 151 S Fern St. Sellersburg IN 47172 (Affected Party)										
14		Wilma & Clifford Weber 101 East Ehringer Lane Sellersburg IN 47172 (Affected Party)										
15		Edward & Denna Wilder 634 Georgian Avenue Sellersburg IN 47172 (Affected Party)										

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1		Jerry & Deborah S. 4813 Greenleaf Road Sellersburg IN 47172 (Affected Party)										
2		The Smith Residence 335 Popp Avenue Sellersburg IN 47172 (Affected Party)										
3		James & Bernadine Hall 614 Georgian Avenue Sellersburg IN 47172 (Affected Party)										
4		Mr. Rudolph Hamblin 548 Eastside Avenue Sellersburg IN 47172 (Affected Party)										
5		Mr. James H Hamilton 1710 Mayfair Drive Sellersburg IN 47172 (Affected Party)										
6		Ms. Dixie Harvey 536 Kay Avenue Sellersburg IN 47172 (Affected Party)										
7		Bob & Sara Hauselman Restoration Christian Church & School 11515 Highway 31 Sellersburg IN 47172 (Affected Party)										
8		James & Joyce Hecker 523 Foothill Road Sellersburg IN 47172 (Affected Party)										
9		Ms. Phyllis Rhodes 606 Lane Avenue Sellersburg IN 47172 (Affected Party)										
10		Mr. Maynard A. Perkins 9141 Virginia Heights Sellersburg IN 47172 (Affected Party)										
11		Belva J. Ollis 611 Whitner Court Sellersburg IN 47172 (Affected Party)										
12		Ms. Nancy Kerstiens 712 Easet Delaware Court Sellersburg IN 47172 (Affected Party)										
13		Mr. Gary Koerber 2413 Allentown Rd. Sellersburg IN 47172 (Affected Party)										
14		Ms. Amy McIntyre 647 Mulberry Street Sellersburg IN 47172 (Affected Party)										
15		Ms. Tammy McKinley 8012 SR 60 Sellersburg IN 47172 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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IDEM Staff	GHOTOPP 6/28/2012 ESSROC Cement Corp 019-26989-00008 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:	CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Kenneth R 2715 Ellentown Road Sellersburg IN 47172 (Affected Party)										
2		W. T. & Janet Kranz 4119 Greenleaf Rd. Sellersburg IN 47172 (Affected Party)										
3		Tony & Judith Lewis 4507 Greenleaf RD Sellersburg IN 47172 (Affected Party)										
4		Gary & Linda Lewis 212 South Fern Street Sellersburg IN 47172 (Affected Party)										
5		Dr. David & Mary Ann Losey 627 Allen RD Sellersburg IN 47172 (Affected Party)										
6		Mr. Bruce A. Mayfield Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
7		Mr. Mark Kayrouz 615 Lincoln Blvd. Sellersburg IN 47172 (Affected Party)										
8		Ms. Yvonne Willhite 8898 East 100 South Seymour IN 47274 (Affected Party)										
9		Mr. Randy Hall 6998 East 300 South Seymour IN 47274 (Affected Party)										
10		Ms. Jennifer Jaynes 7501 East 200 North Seymour IN 47274 (Affected Party)										
11		Ms. Marlyn Coomes 144 Clark Street Speed IN 47172 (Affected Party)										
12		Ms. Dorothy Troub 26 LaSalle Street Speed IN 47172 (Affected Party)										
13		Ms. Shelley Sarles 222 Virgina Street Speed IN 47172 (Affected Party)										
14		Ms. Chrystal Dutz 110 Clark Street Speed IN 47172 (Affected Party)										
15		Mr. Alan K. Waig 162 South Indiana Avenue Speed IN 47172 (Affected Party)										

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1		James S 24 Maple Street Speed IN 47172 (Affected Party)										
2		Ms. Barbara Keehn 21 Maple Speed IN 47172-1314 (Affected Party)										
3		Mrs. Terry Swan-Corya 5119 Bud Prather Road Sellersburg IN 47172 (Affected Party)										
4		Mr. Rodney Donohue 612 Lincoln Blvd Sellersburg IN 47172 (Affected Party)										
5		Ms. Susan Riley 618 Lincoln Blvd Sellersburg IN 47172 (Affected Party)										
6		Robert G. & Beverly Jackson 601 Lincoln Blvd. Speed IN 47172-1312 (Affected Party)										
7		Sellersburg Public Library 430 N Indiana Ave Sellersburg IN 47172 (Library)										
8		Mr. Jim Henderson 27 Maple Street Sellersburg IN 47172 (Affected Party)										
9		The Honorable Paul Robertson 8990 Bird Trail NW Depauw IN 47172 (Legislator)										
10		Clark County Board of Commissioners 501 E. Court Avenue Jeffersonville IN 47130 (Local Official)										
11		Mr. John Groan 5402 Stone Creek Drive Charlestown IN 47111 (Affected Party)										
12		Mr. Carl E Dreyer 830 Dreyer Lane Sellersburg IN 47172 (Affected Party)										
13		Kathy & Greg Gapsis 8175 Old Vincesses Rd Greenville IN 47124 (Affected Party)										
14		Ms. Sarah Whitlow 5164 St. Johns Road Greenville IN 47124 (Affected Party)										
15		Ms. Julie Reising 5221 Clover Ridge Drive Greenville IN 47124-9528 (Affected Party)										

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1		Clark County Health Department 1320 Duncan Avenue Jeffersonville IN 47130-3723 (Health Department)										
2		Mr. James M. Hauck Hatchett & Hauck 111 Monument Circle Suite 301 Indianapolis IN 46204 (Attorney)										
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