



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: October 24, 2013

RE: Essroc Cement Corporation / 019 - 33281 - 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 according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 6/13/13



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David Hitt
ESSROC Cement Corporation
301 Highway 31
Speed, Indiana 47172

October 24, 2013

Re: 019-33281-00008
Significant Source Modification to
Part 70 Renewal No.: T019-26989-00008

Dear Mr. Hitt:

ESSROC Cement Corporation was issued Part 70 Operating Permit Renewal No. T019-26989-00008 on June 28, 2012 for a stationary portland cement manufacturing plant located at 301 Highway 31, Speed, Indiana 47172. An application to modify the source was received on June 6, 2013. Pursuant to the provisions of 326 IAC 2-7-10.5, a significant source modification to this permit is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction and modification at the source:

- (a) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) unit to control its NO_x emissions, and approved in 2013 to install a dry sorbent injection system to control SO₂ emissions, 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), equipped with an SO₂ and NO_x CEMS, and exhausting to stacks S-15 and S-16, respectively. [40 CFR 63, Subpart LLL]
- (b) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Commenced Construction
Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

7. Approval to Construct
Pursuant to 326 IAC 2-7-10.5(h)(2), this significant source modification authorizes the construction of the new emission unit(s), when the significant source modification has been issued.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the significant permit modification has been issued. Operating conditions are incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. 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

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact David Matousek, of my staff, at 317-232-8253 or 1-800-451-6027, and ask for extension 2-8253.

Sincerely,



Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit, Technical Support Document and Appendix A

NCB/djm

cc: File - Clark County
Clark County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
IDEM Southeast Regional Office



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Significant Source Modification to a Part 70 Source

**ESSROC Cement Corporation
301 Highway 31
Speed, Indiana 47172**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

First Significant Source Modification No.: 019-33281-00008

Issued by:

Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

Issuance Date:

October 24, 2013

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, 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 (Hydraulic Cement)
County Location:	Clark County, Silver Creek Township
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, under EO 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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (49) One (1) truck unloading station to gypsum storage piles, identified as EU129, with emissions uncontrolled, commenced before 1945. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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 one (1) baghouse, identified as baghouse 234, exhausting to one (1) stack identified as EP26. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (69) One (1) clinker storage pile, identified as EU121, created before 1960. [40 CFR 63, Subpart LLL]
- (70) North clinker storage pile, identified as EU122, created in May 1971. [40 CFR 63, Subpart LLL]
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126, constructed in May 1971, with emissions uncontrolled. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (110) Two (2) silos for fly ash, 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. [40 CFR 63, Subpart LLL]
- (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 fly ash tank baghouse) and exhausting to stack EPN12. [40 CFR 63, Subpart LLL]
- (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 fly ash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y] [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y] [40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) to control its NO_x emissions, approved in 2013 to install a dry sorbent injection system to control its NO_x emissions, 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. [40 CFR 63, Subpart LLL]
- (130a) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.

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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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 8-3-8]
- (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(35), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 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 46204-2251within two (2) working days of the time when emission limitations were exceeded due to the emergency.

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

- (b) The IDEM, OAQ has made the following 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 (except EU99 and EU102), 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(35).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(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(35).

Request for renewal shall be submitted to:

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) or (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

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

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

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

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

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

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

- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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. The analog instrument shall be capable of measuring values outside of the normal range.
- (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(12)] [40 CFR 68]

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

C.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:
 - (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(35).

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 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

C.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, where applicable:
- (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, where applicable:

- (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(o) and/or 326 IAC 2-3-1(j)) 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(o) and/or 326 IAC 2-3-1(j)) 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] [326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

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

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

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

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

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

- (b) The address for report submittal is:

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

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

- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.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.3.

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.

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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 emissions unit description box is descriptive information and does not constitute enforceable conditions.)

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

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

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1982 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 1.08 lb/hr, after control.
- (b) PM₁₀ emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 0.65 lb/hr, after control.
- (c) The number of holes drilled by the quarry drilling process shall not exceed 38,000 per twelve consecutive month period with compliance determined at the end of each month.
- (d) Particulate matter (PM) emissions shall not exceed 1.3 lb/quarry hole drilled.

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 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 [40 CFR 64]

- (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 [40 CFR 64]

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 reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the 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(35).

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.3.

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.

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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.

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Kiln #1 and Kiln #2 Facilities

(130a) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.

Insignificant Activities: Note: Complete insignificant activity descriptions are in Section A.4.

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 emissions unit description box is descriptive information and does not constitute enforceable conditions.)

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

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

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1985 and 1998/1999 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU74 (warehouse conveyor system for conveying bagged cement) shall not exceed 4.58 lb/hr, after control.
- (b) Combined particulate matter (PM) emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 4.53 lb/hr, after control.
- (c) Combined PM₁₀ emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 2.71 lb/hr, after control.
- (d) Particulate matter (PM) emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 1.15 lb/hr, after control.
- (e) PM₁₀ emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 0.69 lb/hr, after control.

D.2.2 Prevention of Significant Deterioration (PSD) and Emission Offset Minor Limits for PM/PM₁₀/PM_{2.5} – Sorbent Silo [326 IAC 2-2][326 IAC 2-3]

- (a) Throughput of sorbent material in the sorbent silo shall not exceed 43,800 tons per twelve month period with compliance determined at the end of each month.
- (b) PM emissions from the sorbent silo shall not exceed 0.0516 lb PM per ton of sorbent material loaded into the silo, after control.
- (c) PM₁₀ emissions from the sorbent silo shall not exceed 0.0516 lb PM₁₀ per ton of sorbent material loaded into the silo, after control.

- (d) PM_{2.5} emissions from the sorbent silo shall not exceed 0.0516 lb PM_{2.5} per ton of sorbent material loaded into the silo, after control.

Compliance with the above limits, and the proposed increased utilization of kiln #2, shall ensure PM, PM₁₀, and PM_{2.5} emissions will be less than 25 tons per year, 15 tons per year and 10 tons per year, respectively, and will render the requirements of PSD and EO not applicable to the project proposed under significant source modification number 019-33281-00008.

D.2.3 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.
- (o) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159.

D.2.4 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) 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 thousand (1,000) pounds of gases.

D.2.5 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.2.6 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.2.3 - 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.2.7 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.2.3 - Particulate Matter (PM), and D.2.4 - 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 - aumond 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
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

Unit ID (Unit Description)	Baghouse ID
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

- (b) In order to comply with Condition D.2.2, the bin vent filter for the sorbent silo shall be in operation and controlling particulate emissions at all times that the sorbent silo is in operation.

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

D.2.8 Visible Emissions Notations [40 CFR 64]

- (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) Visible emission notations of the bin vent filter for the sorbent storage silo shall be performed once, each time the silo is filled. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) 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), aumond 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 Baghouse Parametric Monitoring [40 CFR 64]

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 reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the 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), aumond 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.2.10 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.2.11 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.8 - 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 or no sorbent was unloaded that day).
- (b) To document the compliance status with Condition D.2.9 - 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) To document the compliance status with Condition D.2.2(a), the Permittee shall maintain daily records of the date and amount of sorbent material unloaded to the sorbent silo.
- (d) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.2.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with the sorbent throughput limit specified in Condition D.2.2(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.3 - FACILITY 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.3.

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 fly ash, 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]

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1994 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 5.68 lb/hr, after control.
- (b) PM₁₀ emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 3.40 lb/hr, after control.
- (c) Particulate matter (PM) emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.27 lb/hr, after control.
- (d) PM₁₀ emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.16 lb/hr, after control.
- (e) Particulate matter (PM) emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 3.65 lb/hr, after control.
- (f) PM₁₀ emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 2.19 lb/hr, after control.
- (g) Particulate matter (PM) emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.68 lb/hr, after control.
- (h) PM₁₀ emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.41 lb/hr, after control.

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 fly ash, 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 fly ash, 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 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 Sulfur Dioxide (SO₂) Emissions Limit [U.S. EPA Consent Decree]

Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, SO₂ emissions from kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU27 shall not exceed 1.7 pounds per ton of clinker produced, based on a 30-day rolling average.

D.3.7 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.
- Compliance with the NO_x limit in Condition D.3.8 shall satisfy the NO_x limit of 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.3.8 Nitrogen Oxide (NO_x) Emissions Limit [USEPA Consent Decree]

Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, the NO_x emissions from kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU27 shall not exceed 2.10 pounds per ton of clinker produced, based on a 30-day rolling average.

D.3.9 NO_x Continuous Emissions Monitoring (CEMS) Downtime

Whenever the NO_x continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the NO_x Selective Non-Catalytic Reduction (SNCR) shall be subject to the following limits:

- (a) Ammonia injection rate into the kiln #2 preheater tower shall not exceed 4 gallon per minute (gpm).

- (b) After completion of the compliance stack testing, ammonia injection into the kiln #2 preheater tower shall not exceed the rate established during the valid compliance stack test in D.3.11(b) that corresponds with zero ammonia slip.

D.3.10 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.3.11 Testing Requirements [326 IAC 20-27-1][326 IAC 2-7-6(1)(6)] [326 IAC 2-1.1-11]

- (a) Within 2.5 years after the most recent valid compliance demonstration, 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. Testing shall be conducted at least once every 2.5 years from the date of the most recent valid compliance demonstration 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.
- (b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after startup of the NO_x SNCR, the Permittee shall perform ammonia stack testing to establish the ammonia injection rate into the Kiln #2 preheater tower, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. No repeat testing is required for this parameter.

D.3.12 NO_x Selective Non-Catalytic Reduction (SNCR) [USEPA Consent Decree]

Pursuant to Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, the Selective Non-Catalytic Reduction (SNCR) systems shall be operated at all times of kiln operation, consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for such control technology and the kiln.

D.3.13 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.3.14 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.3.15 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 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.3.16 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [326 IAC 10-1] [326 IAC 10-3][U.S. EPA Consent Decree]

- (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 the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, NO_x Continuous Emissions Monitoring System (CEMS) shall be installed, calibrated, maintained, and operated to demonstrate compliance with the NO_x emission limit in Condition D.3.8 for kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU027, in accordance with 326 IAC 3-5.

- (c) Pursuant to 326 IAC 10-1-6 (Emissions Monitoring) and 326 IAC 10-3 (Monitoring and Testing Requirements), NO_x CEMS shall be installed, calibrated, maintained, and operated to demonstrate compliance with the NO_x emission limits in Condition D.3.7 for kiln #1 (EU20) and kiln #2 (EU27), in accordance with 326 IAC 3-5.
- (d) All continuous emission monitoring systems (CEMS) are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (e) 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.
- (f) Pursuant to the Consent Decree, U.S. v. ESSROC Cement Corporation, No. 2:11-cv-01650-DSC, signed on February 16, 2012, and referenced in the Federal Register as No. 2:11-cv-0650-DSC, an SO₂ Continuous Emissions Monitoring System (CEMS) shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60 and 326 IAC 3-5, to demonstrate compliance with the SO₂ emission limit in Condition D.3.6, for the combined exhaust of kiln #2, the associated heater (EU69) and the alkali bypass.

D.3.17 Dry Sorbent Injection System [U.S. EPA Consent Decree]

Pursuant to the Consent Decree, U.S. v. ESSROC Cement Corporation, No. 2:11-cv-01650-DSC, signed on February 16, 2012, and referenced in the Federal Register as No. 2:11-cv-0650-DSC, the dry sorbent injection system shall be operated at all times kiln #2 is in operation, consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the dry sorbent injection system and kiln #2.

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

D.3.18 Visible Emissions Notations [40 CFR 64]

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 fly ash (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.3.19 Baghouse Parametric Monitoring [40 CFR 64]

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 reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the 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 fly ash (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.3.20 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.3.21 NO_x Continuous Emissions Monitoring (CEMS) Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the NO_x continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following method shall be used to provide information related to kiln #2 NO_x emissions:

Monitoring of the SNCR operating parameters for the ammonia reductant shall be implemented as follows:

- (a) The Permittee shall record the ammonia injection rate into the kiln #2 Preheater tower continuously until the CEMS is brought online and functioning properly. When for any 1-hour readings, the ammonia injection rate exceeds the injection rate established during the compliance stack testing, the Permittee shall take reasonable response steps. Section C - Response to Excursions or 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.
- (b) The instrument used for determining the ammonia flow rate 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.

D.3.22 SO₂ Continuous Emissions Monitoring System (CEMS) Downtime [U.S. EPA Consent Decree]

The SO₂ CEMS shall be in operation and measuring SO₂ emissions at all times kiln #2 is in operation, except during CEMS breakdown, repairs, calibration checks, and zero span adjustments. During any time when the SO₂ CEMS is inoperable and otherwise not measuring emissions of SO₂ from kiln #2, the Permittee shall apply the missing data procedures in 40 CFR 75, Subpart D.

D.3.23 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.3.24 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.5 - Sulfur Dioxide (SO₂), D.3.14 - Sulfur Dioxide Emissions and Sulfur Content and D.3.15 - 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.3.5 - 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.3.16 - 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 monitoring data and all continuous 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) A log of plant operations, including emission unit or monitoring system downtime with the following information:
 - (A) Date of emissions unit or monitoring system downtime.
 - (B) Time of commencement and completion of each downtime.
 - (C) Reason for each downtime.
 - (D) Nature of system repairs and adjustments
- (d) To document compliance with conditions D.3.21, the Permittee shall maintain records of the ammonia injection rate.

- (e) To document the compliance status with Condition D.3.18 - 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).
- (f) To document the compliance status with Condition D.3.19 - 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).
- (g) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.3.25 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 NO_x emissions as defined in 326 IAC 3-5-7 and 40 CFR Part 60.7) from the continuous emissions 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.
- (f) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7 and 40 CFR Part 60.7, 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.
- (g) A monthly summary of the thirty (30) day rolling average of the CEMS NO_x emissions reading for kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU027 shall be submitted not later than thirty (30) days after the end of each half calendar year being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.
- (h) A monthly summary of the thirty (30) day rolling average of the SO₂ CEMS emissions reading for kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU027 shall be submitted not later than thirty (30) days after the end of each half calendar year being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

- (i) Pursuant to 326 IAC 3-5-7(c)(4), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.

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(35).

SECTION D.4 - FACILITY OPERATION CONDITIONS - Degreasing Operations

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

Degreasing operations

- (1) Degreasing operations. [326 IAC 8-3-2] [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 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 total volume of the solvent; and
 - (5) 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.3.13(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(35). 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 – NSPS, Subpart Y

Emission Units:

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

Coal Handling, Milling and Storage Facilities

- (121) Coal (crusher) mill #2, identified as EU67
- (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

(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

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

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the emission units identified as EU67, EU69 and EU149, except when otherwise specified in 40 CFR 60, Subpart Y.

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);
- 2) 40 CFR 60.251;
- 3) 40 CFR 60.252(a), (a)(1) and (2);
- 4) 40 CFR 60.254(a);
- 5) 40 CFR 60.255(a);
- 6) 40 CFR 60.256(a), (a)(1), (a)(1)(i), (a)(2);
- 7) 40 CFR 60.257(a), (b)(1) through (5); and
- 8) 40 CFR 60.258(b), (b)(2) and (3), (c), and (d).

SECTION F.2 FACILITY OPERATION CONDITIONS – NESHAP, Subpart LLL

Emission Units:

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

Raw Material Stockpile Operations

- (6) Truck unloading to additive hopper or additive storage piles (various sources of Silica/Alumina/Iron), identified as EU99
- (9) Truck unloading to clay storage piles, identified as EU102

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

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

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

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
- (70) North clinker storage pile, identified as EU122
- (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

- (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
- (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
- (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

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 fly ash, 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

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
- (130a) One (1) pneumatic dry sorbent unloading station with a storage silo, identified as EU159

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 insignificant activity descriptions are in Section A.4.

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

F.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the emission units identified as EU08 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU62, EU66 through 69, EU74, EU99, EU102, EU105 through EU109, EU113 through EU115, EU117 through 127, EU129, EU131, EU132, EU135, EU149 through EU151, and EU153 through 158, except when otherwise specified in 40 CFR 63, Subpart LLL.

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

Pursuant to 40 CFR 63, Subpart LLL, the Permittee shall comply with the following provisions of 40 CFR 63, Subpart LLL, which are incorporated by reference as 326 IAC 20-27:

- (a) All affected units constructed on or before December 2, 2005 are subject to the version of Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002], included as Attachment B to the permit. These units remain subject until the compliance date of the February 12, 2013 rules.

The emission units subject to the rule in effect prior to December 20, 2006 are: EU9 to EU12, EU14 to EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU51, EU53, EU54, EU56, EU59, EU60 through 62, EU68, EU69, EU74, EU105, EU106, EU109, EU114, EU119, EU120, EU123, EU124, EU131, EU132, EU135, EU146, EU149 through 151, and EU153.

These units are subject to the following portions of 40 CFR 63, Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002] until September 9, 2015, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342(a), (b) Table 1: Lines 1, 2, 4, 5, and 7;
- 4) 40 CFR 63.1343(a), (b), and (d);
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1345;
- 7) 40 CFR 63.1347;
- 8) 40 CFR 63.1348;
- 9) 40 CFR 63.1349(a), (b)(1)(i) to (v), (b)(2), (b)(3)(i) to (vi) (b)(4);
- 10) 40 CFR 63.1349(c), (d), (e) and (f);
- 11) 40 CFR 63.1349(f) Table 1: Lines 1, 2, 3, 5, 6, 7 and 8;
- 12) 40 CFR 63.1350(a), (b), (c)(1) and (3), (d)(1) and (3);
- 13) 40 CFR 63.1350(e), (f), (g), (h) to (m)
- 14) 40 CFR 63.1350(n) Table 1: Lines 1, 2, 3, 4, 6, 7, and 9
- 15) 40 CFR 63.1351;
- 16) 40 CFR 63.1352;
- 17) 40 CFR 63.1353;
- 18) 40 CFR 63.1354;
- 19) 40 CFR 63.1355;
- 20) 40 CFR 63.1356(a)(1), (b);
- 21) 40 CFR 63.1357;
- 22) 40 CFR 63.1358; and
- 23) Table 1 to Subpart LLL.

- (b) All affected sources constructed after December 2, 2005 are subject to the version of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006], included as Attachment C to the permit. These units remain subject until the compliance date of the rule published on February 12, 2013.

The emission units subject to the rule in effect on December 20, 2006 are EU156, EU157 and EU158.

The emission units numbered EU156, EU157 and EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006] until September 9, 2015, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1348;
- 5) 40 CFR 63.1349(a) and (b)(2);

- 6) 40 CFR 63.1350(a), (j), and (l);
- 7) 40 CFR 63.1350 Table 1: Lines 1, and 9;
- 8) 40 CFR 63.1351(b);
- 9) 40 CFR 63.1353;
- 10) 40 CFR 63.1354(a), (b)(1) to (6), (b)(9)(v);
- 11) 40 CFR 63.1355(a), (b), (c), and (f);
- 12) 40 CFR 63.1357;
- 13) 40 CFR 63.1358; and
- 14) Table 1 to Subpart LLL

- (c) All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The compliance date for the clinker piles in February 12, 2014. EU121 and EU122 are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013], included as Attachment D to the permit, beginning on February 12, 2014.

The emission units numbered EU121 and EU122 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on February 12, 2014, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340(a), (b)(9), (c), and (d);
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), and (c)
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1347;
- 7) 40 CFR 63.1348(d); and
- 8) 40 CFR 63.1351(e).

- (d) All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The following affected sources are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013], included as Attachment D to the permit, beginning on September 9, 2015:

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered EU09 through EU12, EU14 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU54, EU56, EU57, EU59 through EU62, EU66, EU67, EU74, EU99, EU102, EU105 through 109, EU114, EU119, EU120, EU123 through EU127, EU129, EU131, EU132, EU135, EU151, EU154, and EU156 through EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on September 9, 2015:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), (b)(1);
- 5) 40 CFR 63.1343(b)(1) - Table 1: Lines 1, 2, 3, 7, 8, and 13;
- 6) 40 CFR 63.1343 - Table 2: (Table omitted from final rule);

- 7) 40 CFR 63.1343(c) and (d);
- 8) 40 CFR 63.1344;
- 9) 40 CFR 63.1345;
- 10) 40 CFR 63.1346(a), (b), (f), and (g)
- 11) 40 CFR 63.1347;
- 12) 40 CFR 63.1348(a), (b), (f), and (g);
- 13) 40 CFR 63.1347;
- 14) 40 CFR 63.1348 (To be determined prior to September 9, 2015);
- 15) 40 CFR 63.1349(a), (b)(1) and (b)(1)(i);
- 16) 40 CFR 63.1350(a), (b), (d)(1)(i) to (ii), and (d)(2) to (4);
- 17) 40 CFR 63.1350(f) to (l), (m) to (m)(7) to (m)(11)(vi);
- 18) 40 CFR 63.1350(n) to (n)(2), (n)(4) to (10), (o), (p);
- 19) 40 CFR 63.1351;
- 20) 40 CFR 63.1352;
- 21) 40 CFR 63.1353;
- 22) 40 CFR 63.1354(a) to (b)(3), (b)(6) to (10), (c);
- 23) 40 CFR 63.1355;
- 24) 40 CFR 63.1356;
- 25) 40 CFR 63.1357(a) to (c);
- 26) 40 CFR 63.1358; and
- 27) Table 1 to Subpart LLL.

F.2.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry [326 IAC 20-27]

Pursuant to 40 CFR 63.1343(d) - emission limits in effect prior to September 9, 2010, The Permittee shall meet the emission limitation shown in Table 2 of 40 CFR 63, Subpart LLL until September 9, 2015. The Permittee shall comply with the following summary of the applicable portions of Table 2 shown below:

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)

ROW	If your source is...	And it commenced construction or reconstruction.....	And is located at...	Then your emission limits and units are ¹ :
1	An existing kiln	On or prior to December 2, 2005	A major source	PM – 0.3 lb/ton feed Opacity – 20% D/F – 0.2 ² ng/dscm (TEQ) THC – 50 ^{3,4} ppmvd
5	An existing clinker cooler	NA	A major source	PM – 0.1 lb/ton feed Opacity – 10%
6	An existing raw material dryer	On or prior to December 2, 2005	A major source	THC – 50 ^{3,4} ppmvd Opacity – 10%

Footnotes Emissions limits in effect prior to September 9, 2010 table:

- ¹ All emission limits expressed as a concentration basis (ppmvd, ng/dscm) are corrected to seven percent oxygen.
- ² If 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).
- ³ Reported as propane on a 30 day block average (964 FR 31932)
- ⁴ Only applies to greenfield kilns or raw material dryers. Note that a new greenfield kiln is a kiln constructed after March 24, 1998 at a site where there are no existing kilns.

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 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
Part 70 Permit No.: T019-26989-00008

This form consists of 2 pages

Page 1 of 2

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

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

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

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

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

Part 70 Quarterly Report – Quarry Drilling

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

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

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 No.: T019-26989-00008
Facility: Kiln #1 and Kiln #2
Parameter: Sulfur Dioxide (SO₂) emissions
Limit: 6.0 pounds per million BTU heat input

FACILITY _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Coal Sulfur Content (%)	Monthly Average Coal Heat Content (MMBtu/lb)	Coal Consumption (tons)	Equivalent Sulfur Dioxide Emissions (lb/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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865**

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 No.: T019-26989-00008
 Facility: Kiln #1 and Kiln #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:

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

FACILITY _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Sulfur Content (%)		Monthly Average Heat Content (MMBtu/lb)		Month Fuel Consumption		Equivalent Sulfur Dioxide Emissions (lb/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
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178 and Fax: (317) 233-6865

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 No.: T019-26989-00008
Facility: Kiln #1 and Kiln #2
Parameter: Sulfur Dioxide (SO₂) emissions from fuel oil combustion
Limit: 0.5 pounds per million BTU heat input

FACILITY _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (gallons)	Equivalent Sulfur Dioxide Emissions (lb/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: _____

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Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Quarterly Report

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit 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 _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (gallons)	Equivalent Sulfur Dioxide Emissions (lb/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
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100 North Senate Avenue
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Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Quarterly Report – Sorbent Usage

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit No.: T019-26989-00008
Facility: Sorbent Silo EU159
Parameter: Sorbent Throughput
Limit: 43,800 tons per 12 consecutive month period

QUARTER: _____ YEAR: _____

Facility	Month	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Sorbent Silo EU159	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
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Operating Permit - Semi-Annual Report

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172
Part 70 Permit No.: T019-26989-00008
Facility: Kiln #2 and associated preheater, including alkali bypass, identified as EU027
U.S. EPA Consent Decree Limit: 2.10 pounds of NOx per ton clinker produced, based on a 30-day rolling average.

Month: _____ Year: _____

Day	NOx Emissions (lb/ton)	Day	NOx Emissions (lb/ton)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		Total	
16		Average NOx Emissions (Total/30)	

- No deviation occurred in this month.
- Deviation/s occurred in this month.
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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865**

Part 70 Operating Permit - Semi-Annual Report

Source Name: ESSROC Cement Corporation
 Source Address: 301 Highway 31, Speed, Indiana 47172
 Part 70 Permit No.: T019-26989-00008
 Facility: Kiln #2 and associated preheater, including alkali bypass, identified as EU027
 U.S. EPA Consent Decree Limit: 1.7 pounds of SO₂ per ton clinker produced, based on a 30-day rolling average.

Month: _____ Year: _____

Day	SO ₂ Emissions (lb/ton)	Day	SO ₂ Emissions (lb/ton)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		Total	
16		Average SO₂ Emissions (Total/30)	

- No deviation occurred in this month.
 Deviation/s occurred in this month.
 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
Part 70 Permit No.: T019-26989-00008

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

<p>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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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 to a Part 70 Operating Permit

Source Description and Location

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012

40 CFR 60, Subpart Y

40 CFR 60, 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 of 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.

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

Attachment B to a Part 70 Operating Permit

Source Description and Location

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012

40 CFR 63, Subpart LLL – December 6, 2002

40 CFR 63, Subpart LLL **National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry**
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 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 16613, April 5, 2002; 67 FR 72580, December 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 octachlorinated 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, inline kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no inline 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.

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-pdioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002]

Emission Standards and Operating Limits

§63.1342 Standards: General.

- (a) 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.
- (b) Table 1 of this section provides a summary of emission limits and operating limits of this subpart.

TABLE 1 TO §63.1342.—EMISSION LIMITS AND OPERATING LIMITS

Affected Source	Pollutant or Opacity	Emission and Operating Limit
All kilns and in-line kiln/raw mills at major sources (including alkali bypass).	PM Opacity	0.15 kg/Mg of feed (dry basis). 20 percent.
All kilns and in-line kiln/raw mills at major and area sources (including alkali bypass).	D/F	0.20 ng TEQ/dscm or 0.40 ng TEQ/dscm when the average of the performance test run average particulate matter control device (PMCD) inlet temperatures is 204° C or less. [Corrected to 7 percent oxygen] Operate such that the three-hour rolling average PMCD inlet temperature is no greater than the temperature established at performance test. If activated carbon injection is used: Operate such that the three-hour rolling average activated carbon injection rate is no less than rate established at performance test. Operate such that either the carrier gas flow rate or carrier gas pressure drop exceeds the value established at performance test. Inject carbon of equivalent specifications to that used at performance test.
New greenfield kilns and in-line kiln/raw mills at major and area sources.	THC	50 ppmvd, as propane, corrected to 7 percent oxygen.
All clinker coolers at major sources.	PM Opacity	0.050 kg/Mg of feed (dry basis) 10 percent.
All raw mills and finish mills at major sources	Opacity	10 percent.
New greenfield raw material dryers at major and area sources.	THC	50 ppmvd, as propane, corrected to 7 percent oxygen.
All raw material dryers and material handling points at major sources.	Opacity	10 percent.

§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.
- (b) Existing, reconstructed, or new brownfield/major sources. No owner or operator of an existing, reconstructed or new brownfield kiln or an existing, reconstructed or new brownfield in-line kiln/raw mill 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) corrected to seven percent oxygen; or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(c) Greenfield/major sources. No owner or operator that commences construction of a greenfield kiln or greenfield inline kiln/raw mill 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) corrected to seven percent oxygen; or

(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(4) Contain total hydrocarbon (THC), from the main exhaust of the kiln or inline kiln/raw mill, in excess of 50 ppmvd as propane, corrected to seven percent oxygen.

(d) Existing, reconstructed, or new brownfield/area sources. No owner or operator of an existing, reconstructed, or new brownfield kiln or an existing, reconstructed or new brownfield in-line kiln/raw mill 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 contain D/F in excess of:

(1) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ) corrected to seven percent oxygen; or

(2) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(e) Greenfield/area sources. No owner or operator of a greenfield kiln or a greenfield in-line kiln/raw mill 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) corrected to seven percent oxygen; or

(ii) 0.40 ng per dscm (1.7×10^{-11} gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(2) Contain THC, from the main exhaust of the kiln or in-line kiln/raw mill, in excess of 50 ppmvd as propane, corrected to seven percent oxygen.

§63.1344 Operating limits for kilns and inline 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 inline 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 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 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 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.

[64 FR 31925, June 14, 1999, as amended at 67 FR 166613, April 5, 2002; 67 FR 72580, December 6, 2002]

§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 and reconstructed raw material dryers.

(a) Brownfield/major sources. No owner or operator of a new or reconstructed brownfield raw material dryer at a facility which is a major source subject to this subpart shall cause to be discharged into the atmosphere from the new or reconstructed raw material dryer any gases which exhibit opacity greater than ten percent.

(b) Greenfield/area sources. No owner or operator of a greenfield raw material dryer at a facility which is an area source subject to this subpart shall cause to be discharged into the atmosphere from the greenfield raw material dryer any gases which contain THC in excess of 50 ppmvd, reported as propane, corrected to seven percent oxygen.

(c) Greenfield/major sources. No owner or operator of a greenfield raw material dryer at a facility which is a major source subject to this subpart shall cause to be discharged into the atmosphere from the greenfield raw material dryer any gases which:

(1) Contain THC in excess of 50 ppmvd, reported as propane, corrected to seven percent oxygen.

(2) Exhibit opacity greater than ten percent.

§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 inline 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:

$$E = (C_s Q_{sd})/P \quad (\text{Eq. 1})$$

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 inline kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk}Q_{sdk} + C_{sb}Q_{sdb})/P \quad (\text{Eq. 2})$$

Where:

E_c = the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, kg/Mg of kiln feed.

c_{sk} = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent, kg/dscm.

Q_{sdk} = volumetric flow rate of kiln or in-line kiln/raw mill effluent, dscm/hr.

c_{sb} = concentration of particulate matter in the alkali bypass gas, kg/dscm.

Q_{sdb} = volumetric flow rate of alkali bypass gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph (b)(1)(vi) of this section the opacity exhibited during the period of the Method 5 performance tests required by paragraph (b)(1)(i) of this section shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of § 63.1343(b)(2), § 63.1343(c)(2), or § 63.1345(a)(2).

(vi) Each owner or operator of a kiln, in-line kiln/raw mill, or clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (b)(1)(v) of this section, conduct an opacity test in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. If the control device exhausts through a monovalent, or if the use of a COM in accordance with the installation specifications of Performance Specification 1 (PS-1) of appendix B to part 60 of this chapter is not feasible, a test shall be conducted in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. The maximum six-minute average opacity shall be determined during the three Method 5 test runs, and used to demonstrate initial compliance with the applicable opacity limits of § 63.1343(b)(2), § 63.1343(c)(2), or § 63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6minute 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 owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/ raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions

in accordance with §63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with § 63.1344(b).

(v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with § 63.1344(c)(1).

(4) 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.

(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.

(f) Table 1 of this section provides a summary of the performance test requirements of this subpart.

TABLE 1 TO §63.1349.—SUMMARY OF PERFORMANCE TEST REQUIREMENTS

Affected Source and Pollutant	Performance Test
New and existing kiln and in-line kiln/raw mill ^{b,c} PM	EPA Method 5. ^a
New and existing kiln and in-line kiln/raw mill ^{b,c} Opacity	COM if feasible ^{d,e} or EPA Method 9 visual opacity readings.
New and existing kiln and in-line kiln/raw mill ^{b,c,f,g} D/F	EPA Method 23 ^h
New greenfield kiln and in-line kiln/raw mill ^c THC	THC CEM (EPA PS–8A) ⁱ
New and existing clinker cooler PM	EPA Method 5. ^a
New and existing clinker cooler opacity	COM ^{d,j} or EPA Method 9 visual opacity readings.
New and existing raw and finish mill opacity	EPA Method 9. ^{a,j}
New and existing raw material dryer and materials handling processes (raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging, and bulk loading and unloading systems) opacity.	EPA Method 9. ^{a,j}
New greenfield raw material dryer THC	THC CEM (EPA PS–8A). ⁱ

^a Required initially and every 5 years thereafter.

^b Includes main exhaust and alkali bypass.

^c In-line kiln/raw mill to be tested with and without raw mill in operation.

^d Must meet COM performance specification criteria. If the fabric filter or electrostatic precipitator has multiple stacks, daily EPA Method 9 visual opacity readings may be taken instead of using a COM.

^e Opacity limit is 20 percent.

^f Alkali bypass is tested with the raw mill operating or not operating.

^g Temperature and (if applicable) activated carbon injection parameters determined separately with and without the raw mill operating.

^h Required initially and every 30 months thereafter.

ⁱ EPA Performance Specification (PS)–8A of appendix B to 40 CFR part 60.

^j Opacity limit is 10 percent.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002]

§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 semiannually 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.

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 a limitation on D/F 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 emission 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 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.
 - (3) 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.
 - (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. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is 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) A summary of the monitoring requirements of this subpart is given in Table 1 to this section.

TABLE 1 TO §63.1350.—MONITORING REQUIREMENTS

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
All affected sources.....	Operations and maintenance plan	Prepare written plan for all affected sources and control devices.

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
Raw Mills and finish mills at major sources/opacity.	<p>Method 22 visible emissions test. (This requirement does not apply to a raw mill or finish mill equipped with a continuous opacity monitor or bag leak detection system.).</p> <p>Continuous opacity monitor, if applicable</p> <p>Bag leak detection system, if applicable.....</p>	<p>Conduct daily 6-minute Method 22 visible emissions test while mill is operating at representative conditions; if visible emissions are observed, initiate corrective action within 1 hour and conduct follow up Method 22 test. If visible emissions are observed, conduct 30-minute Method 9 test.</p> <p>Install, operate, and maintain in accordance with general provisions and with PS-1. A six-minute average greater than 10% opacity is a violation.</p> <p>Install, operate, and maintain in accordance with §63.1350(m). Operate and maintain such that alarm is not activated and alarm condition does not exist for more than 5% of the total operating time in a 6-month period. If alarm sounds, initiate corrective action.</p>
Kilns and in-line kiln raw mills at major sources (including alkali bypass)/particulate matter.	Particulate matter continuous emission monitoring system.	Deferred

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
<p>Kilns and in-line kiln raw mills at major and area sources (including alkali bypass)/ D/F.</p>	<p>Combustion system inspection...</p> <p>Continuous temperature monitoring at PMCD inlet.....</p> <p>Activated carbon injection rate monitor, if applicable.....</p>	<p>Conduct annual inspection of components of combustion system.</p> <p>Install, operate, calibrate and maintain continuous temperature monitoring and recording system; calculate three-hour rolling averages; verify temperature sensor calibration at least quarterly.</p> <p>Install, operate, calibrate and maintain continuous activated carbon injection rate monitor; calculate three-hour rolling averages; verify calibration at least quarterly; install, operate, calibrate and maintain carrier gas flow rate monitor or carrier gas pressure drop monitor; calculate three-hour rolling averages; document carbon specifications.</p>
<p>New greenfield kilns and in-line kiln raw mills at major and area sources/THC.</p>	<p>Total hydrocarbon continuous emission monitor.</p>	<p>Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30- day block average THC concentration.</p>
<p>Clinker coolers at major sources/opacity</p>	<p>Continuous opacity monitor, if applicable</p> <p>Method 9 opacity test, if applicable</p>	<p>Install, calibrate, maintain and operate in accordance with general provisions and with PS-1.</p> <p>Daily test of at least 30-minutes, while kiln is at representative performance conditions.</p>

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
Raw mills and finish mills at major sources/ opacity.	Method 22 visible emissions test.....	Conduct daily 6-minute Method 22 visible emissions test while mill is operating at representative performance conditions; if visible emissions are observed, initiate corrective action within one hour and conduct follow up Method 22 test. If visible emissions are observed, conduct 30-minute Method 9 Test.
New greenfield raw material dryers at major and area sources/THC.	Total hydrocarbon continuous emission monitor	Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30-day block average THC concentration.
Raw material dryers; raw material, clinker, finished product storage bins; conveying system transfer points; bagging systems; and bulk loading and unloading systems at major sources/opacity	Method 22 visible emissions test.....	As specified in operation and maintenance plan.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 44769, July 5, 2002; 67 FR 72580, December 6, 2002]

§63.1351 Compliance dates.

- (a) 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) 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.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002]

§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).

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 16613, April 5, 2002]

§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 16613, April 5, 2002]

§63.1358 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under subpart E of this part, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authority which will not be delegated to States:

(1) Approval of alternative non-opacity emission standards under § 63.6(g).

(2) Approval of alternative opacity standards under § 63.6(h)(9).

(3) Approval of major changes to test methods under §§ 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).

(4) Approval of major changes to monitoring under § 63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an

entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.

(5) Waiver of recordkeeping under § 63.10(f).

§63.1359 [Reserved]

TABLE 1 TO SUBPART LLL.—APPLICABILITY OF GENERAL PROVISIONS

Citation	Requirement	Applies to Subpart LL	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 source must obtain Title V permits
63.1(c)(3)		NO	[Reserved]
63.1(c)(4)-(5)	Extensions, Notifications	YES	
63.1(d)		NO	[Reserved]
63.1(e)	Applicability of Permit Program	YES	
63.2	Definitions	YES	Additional definitions in §63.1341
63.3(a)-(c)	Units and Abbreviations	YES	
63.4(a)(1)-(3)	Prohibited Activities	YES	
63.4(a)(4)		NO	[Reserved]
63.4(a)(5)	Compliance Date	YES	
63.4(b)-(c)	Circumvention, Severability	YES	
63.5(a)(1)-(2)	Construction/Reconstruction	YES	
63.5(b)(1)	Compliance Dates	YES	
63.5(b)(2)		NO	[Reserved]
63.5(b)(3)-(6)	Construction Approval, Applicability	YES	
63.5(c)		NO	[Reserved]
63.5(d)(1)-(4)	Approval of Construction/Reconstruction	YES	
63.5(e)	Approval of Construction/Reconstruction	YES	
63.5(f)(1)-(2)	Approval of Construction/Reconstruction	YES	
63.6(a)	Compliance for Standards and Maintenance	YES	
63.6(b)(1)-(5)	Compliance Dates	YES	
63.6(b)(6)		NO	[Reserved]
63.6(b)(7)	Compliance Dates	YES	
63.6(c)(1)-(2)	Compliance Dates	YES	
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 and 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	

Citation	Requirement	Applies to Subpart LL	Explanation
63.6(j)	Exemption of 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 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 CEM 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 CEM. 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 CEM.
63.8(f)(1)-(5)	Alternative Monitoring Method	YES	Additional requirements in §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 supercedes requirements for THC CEMS.
63.10(c)(2)-(4)		NO	[Reserved]
63.10(c)(5)-(8)	Additional CMS Recordkeeping	YES	PS-8A supercedes requirements for THC CEMS.
63.10(c)(9)		NO	[Reserved]

Citation	Requirement	Applies to Subpart LL	Explanation
63.10(c)(10)-(15)	Additional CMS Recordkeeping	YES	PS-8A supercedes 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 16613, April 5, 2002]

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

Attachment C to a Part 70 Operating Permit

Source Description and Location

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012

40 CFR 63, Subpart LLL – December 20, 2006

40 CFR 63, Subpart LLL **National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry**
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 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 16613, April 5, 2002; 67 FR 72580, December 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 octachlorinated 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, inline kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no inline 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.

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-pdioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 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 76517, December 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^{-11} 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) 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:

(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 76517, December 20, 2006]

§63.1344 Operating limits for kilns and inline 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 inline 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 166613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 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 and 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 76517, December 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) Documentations 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 inline 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:

$$E = (C_s Q_{sd}) / P \quad (\text{Eq. 1})$$

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 inline kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk} Q_{sdk} + C_{sb} Q_{sdb}) / P \quad (\text{Eq. 2})$$

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 6minute 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 owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/ raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with § 63.1344(b).

(v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the

continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with § 63.1344(c)(1).

(4)(i) The owner or operator of an affected source subject to limitations on emissions of THC shall demonstrate initial compliance with the THC limit by operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 of this chapter. The duration of the performance test shall be three hours, and the average THC concentration (as calculated from the one-minute averages) during the three hour performance test shall be calculated. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/ raw mill is not operating.

(ii) The owner or operator of an affected source subject to limitations on emissions of THC who elects to demonstrate compliance with the alternative THC emission limit of 98 percent weight reduction must demonstrate compliance by also operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 at the inlet to the THC control device of the kiln, inline kiln raw mill, or raw materials dryer in the same manner as prescribed in paragraph (i) above. Alternately, you may elect to demonstrate a 98 weight percent reduction in THC across the control device using the performance test requirements in 40 CFR part 63, subpart SS.

(5) The owner or operator of a kiln or in-line kiln/raw mill subject to the 41 µg/dscm mercury standard shall demonstrate compliance using EPA Method 29 of 40 CFR part 60. ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), is an acceptable alternative to EPA Method 29 (portion for mercury only). If the kiln has an in-line raw mill, you must demonstrate compliance with both raw mill off and raw mill on. You must record the hourly recycle rate of CKD during both test conditions and calculate an average hourly rate for the three test runs for each test condition.(c) Except as provided in paragraph (e) of this section, performance tests required under paragraphs (b)(1) and (b)(2) of this section shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

(d) Performance tests required under paragraph (b)(3) of this section shall be repeated every 30 months.

(e)(1) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable D/ F standard under this subpart, the source must conduct a performance test and establish new temperature limit(s) as specified in paragraph (b)(3) of this section.

(2) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable PM standard under §63.1343, the source must conduct a performance test as specified in paragraph (b)(1) of this section.

(3) In preparation for and while conducting a performance test required in paragraph (e)(1) of this section, a source may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in paragraphs (e)(3)(i) through (iv) of this section are met. The source shall submit temperature and other monitoring data that are recorded during the pretest operations.

(i) The source must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph shall include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (e)(1) of this section, including when the planned operational change period would begin. (ii) The performance test results must be documented in a test report according to paragraph (a) of this section.

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

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

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 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 semiannually 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.

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 a 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 emission 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. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is 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.

TABLE 1 TO §63.1350.—MONITORING REQUIREMENTS

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
All affected sources.....	Operations and maintenance plan	Prepare written plan for all affected sources and control devices.
Raw Mills and finish mills at major sources/opacity.	<p>Method 22 visible emissions test. (This requirement does not apply to a raw mill or finish mill equipped with a continuous opacity monitor or bag leak detection system.).</p> <p>Continuous opacity monitor, if applicable</p> <p>Bag leak detection system, if applicable.....</p>	<p>Conduct daily 6-minute Method 22 visible emissions test while mill is operating at representative conditions; if visible emissions are observed, initiate corrective action within 1 hour and conduct follow up Method 22 test. If visible emissions are observed, conduct 30-minute Method 9 test.</p> <p>Install, operate, and maintain in accordance with general provisions and with PS-1. A six-minute average greater than 10% opacity is a violation.</p> <p>Install, operate, and maintain in accordance with §63.1350(m). Operate and maintain such that alarm is not activated and alarm condition does not exist for more than 5% of the total operating time in a 6-month period. If alarm sounds, initiate corrective action.</p>
Kilns and in-line kiln raw mills at major sources (including alkali bypass)/particulate matter.	Particulate matter continuous emission monitoring system.	Deferred

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
<p>Kilns and in-line kiln raw mills at major and area sources (including alkali bypass)/ D/F.</p>	<p>Combustion system inspection...</p> <p>Continuous temperature monitoring at PMCD inlet.....</p> <p>Activated carbon injection rate monitor, if applicable.....</p>	<p>Conduct annual inspection of components of combustion system.</p> <p>Install, operate, calibrate and maintain continuous temperature monitoring and recording system; calculate three-hour rolling averages; verify temperature sensor calibration at least quarterly.</p> <p>Install, operate, calibrate and maintain continuous activated carbon injection rate monitor; calculate three-hour rolling averages; verify calibration at least quarterly; install, operate, calibrate and maintain carrier gas flow rate monitor or carrier gas pressure drop monitor; calculate three-hour rolling averages; document carbon specifications.</p>
<p>New greenfield kilns and in-line kiln raw mills at major and area sources/THC.</p>	<p>Total hydrocarbon continuous emission monitor.</p>	<p>Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30- day block average THC concentration.</p>
<p>Clinker coolers at major sources/opacity</p>	<p>Continuous opacity monitor, if applicable</p> <p>Method 9 opacity test, if applicable</p>	<p>Install, calibrate, maintain and operate in accordance with general provisions and with PS-1.</p> <p>Daily test of at least 30-minutes, while kiln is at representative performance conditions.</p>

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
Raw mills and finish mills at major sources/ opacity.	Method 22 visible emissions test.....	Conduct daily 6-minute Method 22 visible emissions test while mill is operating at representative performance conditions; if visible emissions are observed, initiate corrective action within one hour and conduct follow up Method 22 test. If visible emissions are observed, conduct 30-minute Method 9 Test.
New greenfield raw material dryers at major and area sources/THC.	Total hydrocarbon continuous emission monitor	Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30-day block average THC concentration.
Raw material dryers; raw material, clinker, finished product storage bins; conveying system transfer points; bagging systems; and bulk loading and unloading systems at major sources/opacity	Method 22 visible emissions test.....	As specified in operation and maintenance plan.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 44769, July 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 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 76517, December 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 76517, December 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 16613, April 5, 2002; 71 FR 76517, December 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 16613, April 5, 2002]

§63.1358 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under subpart E of this part, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States:
 - (1) Approval of alternative non-opacity emission standards under § 63.6(g).
 - (2) Approval of alternative opacity standards under § 63.6(h)(9).
 - (3) Approval of major changes to test methods under §§ 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).
 - (4) Approval of major changes to monitoring under § 63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.
 - (5) Waiver of recordkeeping under § 63.10(f).

§63.1359 [Reserved]

TABLE 1 TO SUBPART LLL.—APPLICABILITY OF GENERAL PROVISIONS

Citation	Requirement	Applies to Subpart LL	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 source must obtain Title V permits
63.1(c)(3)		NO	[Reserved]
63.1(c)(4)-(5)	Extensions, Notifications	YES	
63.1(d)		NO	[Reserved]
63.1(e)	Applicability of Permit Program	YES	
63.2	Definitions	YES	Additional definitions in §63.1341
63.3(a)-(c)	Units and Abbreviations	YES	
63.4(a)(1)-(3)	Prohibited Activities	YES	
63.4(a)(4)		NO	[Reserved]
63.4(a)(5)	Compliance Date	YES	
63.4(b)-(c)	Circumvention, Severability	YES	
63.5(a)(1)-(2)	Construction/Reconstruction	YES	
63.5(b)(1)	Compliance Dates	YES	
63.5(b)(2)		NO	[Reserved]
63.5(b)(3)-(6)	Construction Approval, Applicability	YES	
63.5(c)		NO	[Reserved]
63.5(d)(1)-(4)	Approval of Construction/Reconstruction	YES	
63.5(e)	Approval of Construction/Reconstruction	YES	
63.5(f)(1)-(2)	Approval of Construction/Reconstruction	YES	
63.6(a)	Compliance for Standards and Maintenance	YES	
63.6(b)(1)-(5)	Compliance Dates	YES	
63.6(b)(6)		NO	[Reserved]
63.6(b)(7)	Compliance Dates	YES	
63.6(c)(1)-(2)	Compliance Dates	YES	

Citation	Requirement	Applies to Subpart LL	Explanation
63.6(c)(3)-(4)		NO	[Reserved]
63.6(c)(5)	Compliance Dates	YES	
63.6(d)		NO	[Reserved]
63.6(e)(1)-(2)	Operation and 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 of 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 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 CEM 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 CEM. 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 CEM.
63.8(f)(1)-(5)	Alternative Monitoring Method	YES	Additional requirements in §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	

Citation	Requirement	Applies to Subpart LL	Explanation
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 supercedes requirements for THC CEMS.
63.10(c)(2)-(4)		NO	[Reserved]
63.10(c)(5)-(8)	Additional CMS Recordkeeping	YES	PS-8A supercedes requirements for THC CEMS.
63.10(c)(9)		NO	[Reserved]
63.10(c)(10)-(15)	Additional CMS Recordkeeping	YES	PS-8A supercedes 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 16613, April 5, 2002]

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

Attachment D to a Part 70 Operating Permit

Source Description and Location

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012

40 CFR 63, Subpart LLL – February 12, 2013

**40 CFR 63, Subpart LLL National Emission Standards for Hazardous Air Pollutants for the
Portland Cement Manufacturing Industry**

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

§ 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 and inline coal mills, 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 that 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 that is a major source;

(8) Each bagging and bulk loading and unloading system at any portland cement plant that is a major source; and

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

(c) Onsite sources that are subject to standards for nonmetallic mineral processing plants in subpart 000, part 60 of this chapter are not subject to this subpart. 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, as amended at 78 FR 10036, Feb. 12, 2013]

§ 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.

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 coal mill means those coal mills using kiln exhaust gases in their process. Coal mills with a heat source other than the kiln or coal mills using exhaust gases from the clinker cooler are not an in-line coal mill.

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, inline coal mills or alkali bypasses that produces clinker by heating limestone and other materials for subsequent production of portland cement. Because the inline raw mill and inline coal mill are 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 and the inline coal 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 or reconstruction 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.

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.

Open clinker storage pile means a clinker storage pile on the ground for more than three days that is not completely enclosed in a building or structure.

Operating day means any 24-hour period beginning at 12:00 midnight during which the kiln operates for any time. For calculating the rolling 30-day average emissions, kiln operating days do not include the hours of operation during startup or shutdown.

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 or other 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.

Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

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.

Startup means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.

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 or Method 18 of appendix A to this part or ASTM D6348-03¹ or a combination of these methods, as appropriate. If measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating the total organic HAP value. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 18 fractions) may include a combination of method detection level data and analytical data reported above the method detection level. The owner or operator of an affected source may request the use of other test methods to make this determination under paragraphs 63.7(e)(2)(ii) and (f) of this part.

¹ When using ASTM D6348-03, the following conditions must be met:

(1) The test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory; (2) For ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent

R must be determined for each target analyte (see Equation A5.5); (3) For the ASTM D6348-03 test data to be acceptable for a target analyte percent R must be 70 percent $\geq R \leq 130$ percent; and (4) The percent R value for each compound must be reported in the test report and all field measurements corrected with the calculated percent R value for that compound using the following equation: Reported Result = The measured concentration in the stack divided by the calculated percent R value and then the whole term multiplied by 100.

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; 78 FR 10037, Feb. 12, 2013]

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]

[78 FR 10037, Feb. 12, 2013]

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

(a) *General.* The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, raw material dryer, and open clinker storage pile. All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. You must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means 30 consecutive kiln operating days excluding periods of startup and shutdown. All emissions limits for kilns, clinker coolers, and raw material dryers currently in effect that are superseded by the limits below continue to apply until the compliance date of the limits below, or until the source certifies compliance with the limits below, whichever is earlier.

(b) *Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.* (1) The emissions limits for these sources are shown in Table 1 below. PM limits for existing kilns also apply to kilns that have undergone a modification as defined in subpart A of part 60 of title 40.

Table 1—Emissions Limits for Kilns, Clinker Coolers, Raw Material Dryers, Raw and Finish Mills

	If your source is a (an):	And the operating mode is:	And if is located at a:	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
1.	Existing kiln	Normal operation	Major or area source	PM ¹ 0.07 D/F ² 0.2 Mercury 55 THC ³ ⁴ 24	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
2.	Existing kiln	Normal operation	Major source	HCl 3	ppmvd	7 percent.
3.	Existing kiln	Startup and shutdown	Major or area source	Work practices (63.1346(f))	NA	NA.
4.	New kiln	Normal operation	Major or area source	PM 0.02 D/F ² 0.2 Mercury 21 THC ³ ⁴ 24	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA 7 percent.
5.	New kiln	Normal operation	Major source	HCl 3	ppmvd	7 percent.
6.	New kiln	Startup and shutdown	Major or area source	Work practices (63.1346(f))	NA	NA.
7.	Existing clinker cooler	Normal operation	Major or area source	PM 0.07	lb/ton clinker	NA.
8.	Existing clinker cooler	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA	NA.
9.	New clinker cooler	Normal operation	Major or area source	PM 0.02	lb/ton clinker	NA.
10.	New clinker cooler	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA	NA.
11.	Existing or new raw material dryer	Normal operation	Major or area source	THC ³ ⁴ 24	ppmvd	NA.
12.	Existing or new raw material dryer	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA	NA.
13.	Existing or new raw or finish mill	All operating modes	Major source	Opacity 10	percent	NA.

¹ The initial and subsequent PM performance tests are performed using Method 5 or 5I and consist of three 1-hr tests.

² If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.40 ng/dscm (TEQ).

³ Measured as propane.

⁴ Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP.

(2) When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the combined PM emissions from the kiln and the alkali bypass stack and/or the inline coal mill stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust and/or coal mill exhaust with the kiln exhaust 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 Equation 1 of this section:

$$PM_{alt} = (0.0060 \times 1.65) (Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000) \quad (\text{Eq. 1})$$

Where:

PM_{alt} = Alternative PM emission limit for commingled sources.

0.006 = The PM exhaust concentration (gr/dscf) equivalent to 0.070 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.

1.65 = The conversion factor of ton feed per ton clinker.

Q_k = The exhaust flow of the kiln (dscf/ton feed).

Q_c = The exhaust flow of the clinker cooler (dscf/ton feed).

Q_{ab} = The exhaust flow of the alkali bypass (dscf/ton feed).

Q_{cm} = The exhaust flow of the coal mill (dscf/ton feed).

7000 = The conversion factor for grains (gr) per lb.

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

$$PM_{alt} = (0.0020 \times 1.65) (Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000) \quad (\text{Eq. 2})$$

Where:

PM_{alt} = Alternative PM emission limit for commingled sources.

0.002 = The PM exhaust concentration (gr/dscf) equivalent to 0.020 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.

1.65 = The conversion factor of ton feed per ton clinker.

Q_k = The exhaust flow of the kiln (dscf/ton feed).

Q_c = The exhaust flow of the clinker cooler (dscf/ton feed).

Q_{ab} = The exhaust flow of the alkali bypass (dscf/ton feed).

Q_{cm} = The exhaust flow of the coal mill (dscf/ton feed).

7000 = The conversion factor for gr per lb.

(c) *Open clinker storage pile.* The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (see § 63.1347 of this subpart), that is appropriate for the site conditions as specified in paragraphs (c)(1) through (3) of this section. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.

(1) The operation and maintenance plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the owner or operator will use to minimize fugitive dust emissions from each open clinker storage pile.

(2) For open clinker storage piles, the operations and maintenance plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents, use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. You must select, for inclusion in the operations and maintenance plan, the fugitive dust 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) Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days.

(d) Emission 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, 2015.

[78 FR 10037, Feb. 12, 2013]

§ 63.1344 Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in § 63.1343(b) and (c) and § 63.1345 and you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control 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) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- (2) Repairs were made as expeditiously as possible when a violation occurred; and
- (3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
- (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (5) All possible steps were taken to minimize the impact of the violation 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, consistent with safety and good air pollution control practices; and
- (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
- (8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and
- (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[78 FR 10039, Feb. 12, 2013]

§ 63.1345 Emissions limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers.

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; bulk loading or unloading system; raw and finish mills; 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 10 percent.

[78 FR 10039, Feb. 12, 2013]

§ 63.1346 Operating limits for kilns.

(a) The owner or operator of a kiln subject to a D/F emissions limitation under § 63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln PM 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 emissions 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 and 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 emissions limitation under § 63.1343 that employs sorbent injection as an emission control technique for D/F control, you must operate the sorbent injection system in accordance with paragraphs (c)(1) and (2) of this section.

(1) The rolling three-hour 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 rolling three-hour 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 rolling three-hour 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 emissions 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 emissions 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 is in compliance with a mercury emissions limit specified in § 63.1343, this paragraph no longer applies.

(g) During periods of startup and shutdown you must meet the requirements listed in (g)(1) through (4) of this section.

(1) During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.

(2) Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.

(3) All air pollution control devices must be turned on and operating prior to combusting any fuel.

(4) You must keep records as specified in § 63.1355 during periods of startup and shutdown.

[75 FR 55054, Sept. 9, 2010, as amended at 78 FR 10039, Feb. 12, 2013]

§ 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 emissions limits and operating limits, including fugitive dust control measures for open clinker piles, of §§ 63.1343 through 63.1348. Your operations and maintenance plan must address periods of startup and shutdown;

(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, as amended at 78 FR 10040, Feb. 12, 2013]

§ 63.1348 Compliance requirements.

(a) *Initial Performance Test Requirements.* For an affected source subject to this subpart, you must demonstrate compliance with the emissions standards and operating limits by using the test methods and procedures in §§ 63.1349 and 63.7. Any cement kiln that has been subject to the requirements of subpart CCCC or subpart DDDD of 40 CFR Part 60, and is now electing to cease burning nonhazardous solid waste and become subject to this subpart, must meet all the initial compliance testing requirements each time it becomes subject to this subpart, even if it was previously subject to this subpart.

NOTE TO PARAGRAPH (a): The first day of the 30 operating day performance test is the first day after the compliance date following completion of the field testing and data collection that demonstrates that the CPMS or CEMS has satisfied the relevant CPMS performance evaluation or CEMS performance specification (e.g., PS 2, 12A, or 12B) acceptance criteria. The performance test period is complete at the end of the 30th consecutive operating day. See § 63.1341 for definition of operating day and § 63.1348(b)(1) for the CEMS operating requirements. The source has the option of performing the compliance test earlier than the compliance date if desired.

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

(2) *Opacity Compliance.* If you are subject to the limitations on opacity under § 63.1345, you must demonstrate compliance with the opacity emissions standards by using the performance test methods and procedures in § 63.1349(b)(2). Use the maximum 6-minute average opacity exhibited during the performance test period to determine whether the affected source is in 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. The owner or operator of a kiln with an in-line raw mill must demonstrate compliance by conducting separate performance tests while the raw mill is operating and while the raw mill is not operating. Determine the D/F TEQ concentration for each run and calculate the arithmetic average of the TEQ concentrations measured for the three runs to determine continuous compliance.

(ii) If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance with the temperature operating limits specified in § 63.1346 by using the performance test methods and procedures in § 63.1349(b)(3)(ii) through (b)(3)(iv). Use the arithmetic average of the temperatures measured during the three runs to determine the applicable temperature limit.

(iii) If activated carbon injection is used and you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance with the activated carbon injection rate operating limits specified in § 63.1346 by using the performance test methods and procedures in § 63.1349(b)(3)(v).

(iv) If activated carbon injection is used, you must also develop a carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) during the initial performance test and updated during any subsequent 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 determined in accordance with the procedures and criteria submitted for review in your monitoring plan required in section 63.1350(p).

(4)(i) *THC Compliance.* If you are subject to limitations on THC emissions under § 63.1343(b), you must demonstrate compliance with the THC emissions standards by using the performance test methods and procedures in § 63.1349(b)(4)(i). You must use the average THC concentration obtained during the first 30 kiln operating days after the compliance date of this rule 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 compliance with the total organic HAP emissions standards by using the performance test methods and procedures in § 63.1349(b)(7).

(iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in § 63.1349(b)(7) while the raw mill of the inline kiln/raw mill is operating and while the raw mill of the inline kiln/raw mill is not operating.

(iv) The average total organic HAP concentration measured during the separate initial performance test specified by § 63.1349(b)(7) must be used to determine initial compliance.

(v) The average THC concentration measured during the initial performance test specified by § 63.1349(b)(4) must be used to determine the site-specific THC limit. Using the fraction of time the inline kiln/raw mill is on and the fraction of time that the inline kiln/raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off testing using one of the two approaches in § 63.1349(b)(7)(vii) or (viii) depending on the level of organic HAP measured during the compliance test.

(5) *Mercury Compliance.* If you are subject to limitations on mercury emissions in § 63.1343(b), you must demonstrate compliance with the mercury standards by using the performance test methods and procedures in § 63.1349(b)(5). You must demonstrate compliance by operating a mercury CEMS or a sorbent trap based CEMS. Compliance with the mercury emissions standard must be determined based on the first 30 operating days you operate a mercury CEMS or sorbent trap monitoring system after the compliance date of this rule.

(i) In calculating a 30 operating day emissions value using an integrating sorbent trap CEMS, assign the average Hg emissions concentration determined for an integrating period (e.g., 7 day sorbent trap monitoring system sample) to each relevant hour of the kiln operating days spanned by each integrated sample. Calculate the 30 kiln operating day emissions rate value using the assigned hourly Hg emissions concentrations and the respective flow and production rate values collected during the 30 kiln operating day performance test period. Depending on the duration of each integrated sampling period, you may not be able to calculate the 30 kiln operating day emissions value until several days after the end of the 30 kiln operating day performance test period.

(ii) For example, a sorbent trap monitoring system producing an integrated 7-day sample will provide Hg concentration data for each hour of the first 28 kiln operating days (i.e., four values spanning 7 days each) of a 30 operating day period. The Hg concentration values for the hours of the last 2 days of the 30 operating day period will not be available for calculating the emissions for the performance test period until at least five days after the end of the subject period.

(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, tray tower or dry scrubber, you may demonstrate initial compliance by conducting a performance test as specified in § 63.1349(b)(6)(i). You must determine the HCl concentration for each run and calculate the arithmetic average of the

concentrations measured for the three runs to determine compliance. You must also establish appropriate site-specific operational parameter limits.

(ii) For an affected source that is not equipped with a wet scrubber, tray tower or dry scrubber, you must demonstrate initial compliance by operating a CEMS as specified in § 63.1349(b)(6)(ii). You must use the average of the hourly HCl values obtained during the first 30 kiln operating days that occur after the compliance date of this rule to determine initial compliance.

(7) *Commingled Exhaust Requirements.* If the coal mill exhaust is commingled with kiln exhaust in a single stack, you may demonstrate compliance with the kiln emission limits by either:

(i) Performing required emissions monitoring and testing on the commingled coal mill and kiln exhaust, or

(ii) Perform required emission monitoring and testing of the kiln exhaust prior to the reintroduction of the coal mill exhaust, and also testing the kiln exhaust diverted to the coal mill. All emissions must be added together for all emission points, and must not exceed the limit per each pollutant as listed in S63.1343(b).

(b) *Continuous Monitoring Requirements.* You must demonstrate 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(p).

(ii) Except for periods of startup and shutdown, 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.

(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. You 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 mercury emissions (lb/MM tons of clinker) under § 63.1343(b), you must determine 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 use the monitoring methods and procedures in § 63.1350(b) and (d).

(3) *Opacity Compliance.* If you are subject to the limitations on opacity under § 63.1345, you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(f) based on the maximum 6-minute average opacity exhibited during the performance test period. You must initiate corrective actions within one hour of detecting visible emissions above the applicable limit.

(i) *COMS.* If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a COMS such that it is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(i).

(ii) Bag leak determination system (*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 compliance using a BLDS that is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(ii).

(4) *D/F Compliance*. If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of § 63.1350(g).

(5)(i) *Activated Carbon Injection Compliance*. If you use activated carbon injection to comply with the D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated, and maintained to record the rate of activated carbon injection in accordance with the requirements § 63.1350(h)(1).

(ii) If you use activated carbon injection to comply with the D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated and maintained to record the activated carbon injection system gas parameter in accordance with the requirements of § 63.1350(h)(2).

(6) *THC Compliance*. (i) If you are subject to limitations on THC emissions under § 63.1343(b), you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(i) and (j).

(ii) THC must be measured either upstream of the coal mill or in the coal mill stack.

(7) *Mercury Compliance*. (i) If you are subject to limitations on mercury emissions in § 63.1343(b), you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(k). If you use an integrated sorbent trap monitoring system to determine ongoing compliance, use the procedures described in § 63.1348(a)(5) to assign hourly mercury concentration values and to calculate rolling 30 operating day emissions rates. Since you assign the mercury concentration measured with the sorbent trap to each relevant hour respectively for each operating day of the integrated period, you may schedule the sorbent trap change periods to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals).

(ii) Mercury must be measured either upstream of the coal mill or in the coal mill stack.

(8) *HCl Compliance*. If you are subject to limitations on HCl emissions under § 63.1343(b), you must demonstrate compliance 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, tray tower or a dry sorbent injection system, you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(l)(1).

(ii) For an affected source that is equipped with a wet scrubber, tray tower or a dry sorbent injection system, you may demonstrate compliance using the monitoring methods and procedures in § 63.1350(l)(2).

(iii) HCl may be measured either upstream of the coal mill or in the coal mill stack.

(iv) As an alternative to paragraph (b)(8)(ii) of this section, you may use an SO₂ CEMS to establish an SO₂ operating level during your initial and repeat HCl performance tests and monitor the SO₂ level using the procedures in § 63.1350(l)(3).

(9) *Startup and Shutdown Compliance*. In order to demonstrate continuous compliance during startup and shutdown, all air pollution control devices must be operating.

(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 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, as amended at 78 FR 10040, Feb. 12, 2013]

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

(a) You must document performance test results in complete test reports that contain the information required by paragraphs (a)(1) through (10) of this section, as well as all other relevant information. As described in § 63.7(c)(2)(i), you must make available to the Administrator prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from an alkali bypass stack or a coal mill stack, you must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in paragraphs § 63.1350(n)(1) through (10) of this subpart or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on the alkali bypass stack or coal mill stack, you may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.

(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.* The owner or operator of a kiln subject to limitations on PM emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You must also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS).

(i) For your PM CPMS, you will establish a site-specific operating limit. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You will use the PM CPMS to demonstrate continuous compliance with your operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(A) Your PM CPMS must provide a 4-20 milliamp output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps.

(B) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to three times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to three times your allowable emission limit.

(C) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(ii) Determine your operating limit as specified in paragraphs (b)(1)(iii) through (iv) of this section. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You must verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test at least

annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(iii) If the average of your three Method 5 or 5I compliance test runs is below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the procedures in (a)(1)(iii)(A) through (D) of this section.

(A) Determine your PM CPMS instrument zero output with one of the following procedures.

(1) Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(2) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.

(3) The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(4) If none of the steps in paragraphs (a)(1)(iii)(A)(1) through (3) of this section are possible, you must use a zero output value provided by the manufacturer.

(B) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 3.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 3})$$

Where:

X_1 = The PM CPMS data points for the three runs constituting the performance test.

Y_1 = The PM concentration value for the three runs constituting the performance test.

n = The number of data points.

(C) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run PM compliance test average, determine a relationship of lb/ton-clinker per milliamp with Equation 4.

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 4})$$

Where:

R = The relative lb/ton-clinker per milliamp for your PM CPMS.

Y_1 = The three run average lb/ton-clinker PM concentration.

X_1 = The three run average milliamp output from you PM CPMS.

z = The milliamp equivalent of your instrument zero determined from (b)(1)(iii)(A).

(D) Determine your source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp value from Equation 4 in Equation 5, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R} \quad (\text{Eq. 5})$$

Where:

O_1 = The operating limit for your PM CPMS on a 30-day rolling average, in milliamps.

L = Your source emission limit expressed in lb/ton clinker.

z = Your instrument zero in milliamps, determined from (1)(i).

R = The relative lb/ton-clinker per milliamp for your PM CPMS, from Equation 4.

(iv) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using Equation 6.

$$O_h = \frac{1}{n} \sum_{i=1}^n X_i \quad (\text{Eq. 6})$$

Where:

X_1 = The PM CPMS data points for all runs i .

n = The number of data points.

O_h = Your site specific operating limit, in milliamps.

(v) To determine continuous operating compliance, you must record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for calculations when the source is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 7 to determine the 30 kiln operating day average.

$$30\text{kiln operating day} = \frac{\sum_{i=1}^n H_{pwi}}{n} \quad (\text{Eq. 7})$$

Where:

H_{pvi} = The hourly parameter value for hour i.

n = The number of valid hourly parameter values collected over 30 kiln operating days.

(vi) For each performance test, conduct at least three separate test runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. Conduct each test run to collect a minimum sample volume of 2 dscm for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Calculate the average of the results from three consecutive runs, including applicable sources as required by (D)(viii), to determine compliance. You need not determine the particulate matter collected in the impingers (“back half”) of the Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the “back half” for other purposes.

(vii) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(viii) When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the main exhaust and alkali bypass and/or inline coal mill must be tested simultaneously and the combined emission rate of PM from the kiln and alkali bypass and/or inline coal mill must be computed for each run using Equation 8 of this section.

$$E_c = \frac{E_k + E_b + E_c}{P} \quad (\text{Eq. 8})$$

Where:

E_c = Combined hourly emission rate of PM from the kiln and bypass stack and/or inline coal mill, lb/ton of kiln clinker production.

E_k = Hourly emissions of PM emissions from the kiln, lb.

E_b = Hourly PM emissions from the alkali bypass stack, lb.

E_c = Hourly PM emissions from the inline coal mill stack, lb.

P = Hourly clinker production, tons.

(ix) The owner or operator of a kiln with an in-line raw mill and subject to limitations on PM emissions shall demonstrate initial compliance by conducting separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating.

(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. If your kiln or in-line kiln/raw mill is equipped with an alkali bypass, you must conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. You 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, you must record the rate of sorbent injection to the kiln exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, continuously during the period of the Method 23 test in accordance with the conditions in § 63.1350(m)(9), and include the continuous injection rate record(s) in the performance test report. Determine the sorbent injection rate parameters in accordance with paragraphs (b)(3)(vi) of this section.

(B) Include the brand and type of sorbent used during the performance test in the performance test report.

(C) 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, 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, 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) Calculate the run average sorbent injection rate for each run and determine and include the average of the run average injection rates in the performance test report and determine the applicable injection rate limit in accordance with § 63.1346(c)(1).

(4) *THC emissions test.* (i) If you are subject to limitations on THC emissions, you must operate a CEMS in accordance with the requirements in § 63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd and the reference method (RM) is Method 25A of appendix A to part 60 of this chapter.

(ii) Use the THC CEMS to conduct the initial compliance test for the first 30 kiln operating days of kiln operation after the compliance date of the rule. See 63.1348(a).

(iii) If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, you must calculate a kiln-specific THC limit using Equation 9:

$$C_{ks} = \frac{(MACT\ Limit \times (Q_{ab} + Q_{cm} + Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm})}{Q_{ks}} \quad ((Eq. 9))$$

Where:

C_{ks} = Kiln stack concentration (ppmvd).

Q_{ab} = Alkali bypass flow rate (volume/hr).

C_{ab} = Alkali bypass concentration (ppmvd).

Q_{cm} = Coal mill flow rate (volume/hr).

C_{cm} = Coal mill concentration (ppmvd).

Q_{ks} = Kiln stack flow rate (volume/hr).

(iv) THC must be measured either upstream of the coal mill or the coal mill stack.

(v) Instead of conducting the performance test specified in paragraph (b)(4) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(7) of this section.

(5) *Mercury Emissions Tests.* If you are subject to limitations on mercury emissions, you must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of § 63.1350(k). The initial compliance test must be based on the first 30 kiln operating days in which the affected source operates using a mercury CEMS or a sorbent trap monitoring system after the compliance date of the rule. See § 63.1348(a).

(i) If you are using a mercury CEMS or a sorbent trap monitoring system, 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)(5).

(ii) Calculate the emission rate using Equation 10 of this section:

$$E_{30D} = k \frac{\sum_{i=1}^n C_i Q_i}{P} \quad (Eq. 10)$$

Where:

E_{30D} = 30-day rolling emission rate of mercury, lb/MM tons clinker.

C_i = Concentration of mercury for operating hour i, µg/scm.

Q_i = Volumetric flow rate of effluent gas for operating hour i, where C_i and Q_i are on the same basis (either wet or dry), scm/hr.

k = Conversion factor, 1 lb/454,000,000 µg.

n = Number of kiln operating hours in a 30 kiln operating day period.

P = 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

(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, tray tower or dry scrubber, 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). For kilns with inline raw mills, testing should be conducted for the raw mill on and raw mill off conditions.

(B) You must establish site specific parameter limits by using the CPMS required in § 63.1350(l)(1). For a wet scrubber or tray tower, 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. For a dry scrubber, measure and record the sorbent injection rate in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average sorbent injection rate and average sorbent injection 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, tray tower or dry sorbent injection system, you must operate a CEMS in accordance with the requirements of § 63.1350(l)(1). See § 63.1348(a).

(B) The initial compliance test must be based on the 30 kiln operating days that occur after the compliance date of this rule in which the affected source operates using a HCl CEMS. Hourly HCl concentration data must be obtained according to § 63.1350(l).

(iii) As an alternative to paragraph (b)(6)(i)(B) of this section, you may choose to monitor SO₂ emissions using a CEMS in accordance with the requirements of § 63.1350(l)(3). You must establish an SO₂ operating limit equal to the highest 1 hour average recorded during the HCl stack test. This operating limit will apply only for demonstrating HCl compliance.

(iv) If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, you must calculate a kiln-specific HCl limit using Equation 11:

$$C_{ks} = \frac{(MACT\ Limit \times (Q_{ab} + Q_{cm} + Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm})}{Q_{ks}} \quad (Eq. 11)$$

Where:

C_{ks} = Kiln stack concentration (ppmvd).

Q_{ab} = Alkali bypass flow rate (volume/hr).

C_{ab} = Alkali bypass concentration (ppmvd).

Q_{cm} = Coal mill flow rate (volume/hr).

C_{cm} = Coal mill concentration (ppmvd).

Q_{ks} = Kiln stack flow rate (volume/hr).

(7) *Total Organic HAP Emissions Tests.* Instead of conducting the performance test specified in paragraph (a)(4) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (a)(7)(i) through (v) of this section.

(i) Use Method 320 of appendix A to this part, Method 18 of Appendix A of part 60, ASTM D6348-03 or a combination 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.

(ii) At the same time that you are conducting the performance test for total organic HAP, you must also determine a site-specific THC emissions limit by operating a THC CEMS in accordance with the requirements of § 63.1350(j). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated. You must establish your THC operating limit and determine compliance with it according to paragraphs (a)(7)(vii) through (viii) of this section. It is permissible to extend the testing time of the organic HAP performance test if you believe extended testing is required to adequately capture THC variability over time.

(iii) If your source has an in-line kiln/raw mill you must use the fraction of time the raw mill is on and the fraction of time that the raw mill is off and calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off testing.

(iv) If your organic HAP emissions are below 75 percent of the organic HAP standard and you determine your operating limit with paragraph (b)(7)(vii) of this section your THC CEMS must be calibrated and operated on a measurement scale no greater than 180 ppmvw, as carbon, or 60 ppmvw as propane.

(v) Your THC CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times your highest THC emissions average determined during your performance test, including mill on or mill off operation. NOTE: This may require the use of a dual range instrument to meet this requirement and paragraph (b)(7)(iv) of this section.

(vi) Determine your operating limit as specified in paragraphs (a)(7)(vii) and (viii) of this section. If your organic HAP performance test demonstrates your average organic HAP emission levels are below 75 percent of your emission limit (9 ppmv) you will use the average THC value recorded during the organic HAP performance test, and the average total organic HAP result of your performance test to establish your operating limit. If your organic HAP compliance test results demonstrate your average organic HAP emission levels are at or above 75 percent of your emission limit, your operating limit is established as the average THC value recorded during the organic HAP performance test. You must establish a new operating limit after each performance test. You must repeat the performance test no later than 30 months following your last performance test and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(vii) If the average organic HAP results for your three Method 18 and/or Method 320 performance test runs are below 75 percent of your organic HAP emission limit, you must calculate an operating limit by establishing a relationship of THC CEMS signal to the organic HAP concentration using the average THC CEMS value corresponding to the three organic HAP compliance test runs and the average organic HAP total concentration from the Method 18 and/or Method 320 performance test runs with the procedures in (a)(7)(vii)(A) and (B) of this section.

(A) Determine the THC CEMS average values in ppmvw, and the average of your corresponding three total organic HAP compliance test runs, using Equation 12.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n y_i \quad (\text{Eq. 12})$$

Where:

\bar{x} = The THC CEMS average values in ppmvw.

X_i = The THC CEMS data points for all three runs i.

Y_i = The sum of organic HAP concentrations for test runs i. and

n = The number of data points.

(B) You must use your three run average THC CEMS value, and your three run average organic HAP concentration from your three Method 18 and/or Method 320 compliance tests to determine the operating limit. Use equation 13 to determine your operating limit in units of ppmvw THC, as propane.

$$T_1 = \left(\frac{9}{Y_1}\right) \cdot X_1 \quad (\text{Eq. 13})$$

Where:

T_1 = The 30-day operating limit for your THC CEMS, ppmvw.

Y_1 = The average organic HAP concentration from Eq. 12, ppmv.

X_1 = The average THC CEMS concentration from Eq. 12, ppmvw.

(viii) If the average of your three organic HAP performance test runs is at or above 75 percent of your organic HAP emission limit, you must determine your operating limit using Equation 14 by averaging the THC CEMS output values corresponding to your three organic HAP performance test runs that demonstrate compliance with the emission limit. If your new THC CEMS value is below your current operating limit, you may opt to retain your current operating limit, but you must still submit all performance test and THC CEMS data according to the reporting requirements in paragraph (d)(1) of this section.

$$T_h = \frac{1}{n} \sum_{i=1}^n X_i \quad (\text{Eq. 14})$$

Where:

X_i = The THC CEMS data points for all runs i.

Y_i = The organic HAP total value for runs i.

n = The number of data points.

T_h = Your site specific operating limit, in ppmvw THC.

(ix) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating ("mill on") and while the raw mill is not operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with Equation 15.

$$R = (y \cdot t) + (x \cdot (1-t)) \quad (\text{Eq. 15})$$

Where:

R = Operating limit as THC, ppmvw.

y = Average THC CEMS value during mill on operations, ppmvw.

t = Percentage of operating time with mill on.

x = Average THC CEMS value during mill off operations, ppmvw.

(1-t) = Percentage of operating time with mill off.

(x) To determine continuous compliance with the THC operating limit, you must record the THC CEMS output data for all periods when the process is operating and the THC CEMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the THC CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 16 to determine the 30 kiln operating day average.

$$30\text{kiln operating day} = \frac{\sum_{i=1}^n H_{pvi}}{n} \quad (\text{Eq. 16})$$

Where:

H_{pvi} = The hourly parameter value for hour i, ppmvw.

n = The number of valid hourly parameter values collected over 30 kiln operating days.

(xi) Use EPA Method 18 or Method 320 of appendix A to part 60 of this chapter to determine organic HAP emissions. For each performance test, conduct at least three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. If your source has an in-line kiln/raw mill you must conduct three separate test runs with the raw mill on, and three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur with the mill off. Conduct each Method 18 test run to collect a minimum target sample equivalent to three times the method detection limit. Calculate the average of the results from three runs to determine compliance.

(xii) If the THC level exceeds by 10 percent or more your site-specific THC emissions limit, you must

(A) As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the THC CEMS measurements to within the established value; and

(B) Within 90 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct another performance test to determine compliance with the organic HAP limit and to verify or re-establish your site-specific THC emissions limit.

(8) HCl Emissions Tests with SO₂ Monitoring. If you choose to monitor SO₂ emissions using a CEMS to demonstrate HCl compliance, follow the procedures in (b)(8)(i) through (ix) of this section and in accordance with the requirements of § 63.1350(l)(3). You must establish an SO₂ operating limit equal to the average of the SO₂ emissions recorded during the HCl stack test. This operating limit will apply only for demonstrating HCl compliance.

(i) Use Method 321 of appendix A to this part to determine emissions of HCl. 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 one hour.

(ii) At the same time that you are conducting the performance test for HCl, you must also determine a site-specific SO₂ emissions limit by operating an SO₂ CEMS in accordance with the requirements of § 63.1350(l). The duration of the performance test must be three hours and the average SO₂ concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated. You must establish your SO₂ operating limit and determine compliance with it according to paragraphs (b)(8)(vii) and (viii) of this section.

(iii) If your source has an in-line kiln/raw mill you must use the fraction of time the raw mill is on and the fraction of time that the raw mill is off and calculate this limit as a weighted average of the SO₂ levels measured during raw mill on and raw mill off testing.

(iv) Your SO₂ CEMS must be calibrated and operated according to the requirements of § 60.63(f).

(v) Your SO₂ CEMS measurement scale must be capable of reading SO₂ concentrations consistent with the requirements of § 60.63(f), including mill on or mill off operation.

(vi) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating (“mill on”) and while the raw mill is not operating (“mill off”). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with Equation 17.

$$R = (y \cdot t) + x \cdot (t-1) \quad (\text{Eq. 17})$$

Where:

R = Operating limit as SO₂, ppmvw.

y = Average SO₂ CEMS value during mill on operations, ppmvw.

t = Percentage of operating time with mill on, expressed as a decimal.

x = Average SO₂ CEMS value during mill off operations, ppmvw.

t-1 = Percentage of operating time with mill off, expressed as a decimal.

(vii) To determine continuous compliance with the SO₂ operating limit, you must record the SO₂ CEMS output data for all periods when the process is operating and the SO₂ CEMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the SO₂ CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 18 to determine the 30 kiln operating day average.

$$30\text{kiln operating day} = \frac{\sum_{i=1}^n H_{pvi}}{n} \quad (\text{Eq. 18})$$

Where:

H_{pvi} = The hourly parameter value for hour i, ppmvw.

n = The number of valid hourly parameter values collected over 30 kiln operating days.

(viii) Use EPA Method 321 of appendix A to part 60 of this chapter to determine HCl emissions. For each performance test, conduct at least three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. If your source has

an in-line kiln/raw mill you must conduct three separate test runs with the raw mill on, and three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur with the mill off.

(ix) If the SO₂ level exceeds by 10 percent or more your site-specific SO₂ emissions limit, you must

(A) As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the SO₂ CEMS measurements to within the established value. and

(B) Within 90 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct another performance test to determine compliance with the HCl limit and to verify or re-establish your site-specific SO₂ emissions limit.

(c) *Performance Test Frequency.* Except as provided in § 63.1348(b), performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS. Tests for PM are repeated every 12 months.

(d) *Performance Test Reporting Requirements.* (1) You must submit the information specified in paragraphs (d)(1) and (2) of this section no later than 60 days following the initial performance test. All reports must be signed by a responsible official.

(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)(1), (3), (6), and (7) 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 any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically to the 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) *Conditions of performance tests.* Conduct performance tests 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, as amended at 78 FR 10040, Feb. 12, 2013]

§ 63.1350 Monitoring requirements.

(a)(1) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of this section.

(2) All continuous monitoring data for periods of startup and shutdown must be compiled and averaged separately from data gathered during other operating periods.

(3) For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests.

(4) Any instance where the owner or operator fails to comply with the continuous monitoring requirements of this section is a violation.

(b) *PM monitoring requirements.* (1)(i) *PM CPMS.* You will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in § 63.1349(b)(1) (i) through (vi) of this subpart. You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration.

(ii) To determine continuous compliance, you must use the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day.

(iii) For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, you must:

(A) Within 48 hours of the exceedance, visually inspect the APCD;

(B) If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

(C) Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph.

(iv) PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of this subpart.

(2) [Reserved]

(c) [Reserved]

(d) *Clinker production monitoring requirements.* In order to determine clinker production, 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, or

(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. Update this ratio 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.

(iii) [Reserved]

(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before initial use (for new sources) or by the effective compliance date of this rule (for existing sources). 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) If you measure clinker production directly, record the daily clinker production rates; if you measure the kiln feed rates and calculate clinker production, record the hourly kiln feed and clinker production rates.

(4) Develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(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 opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) of this section and in accordance with your monitoring plan developed under § 63.1350(p). You must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (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 30 minutes of opacity observations, recorded at 15-second intervals, 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) Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. 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 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 (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 visible emissions observations of the mill sweep and air separator PM 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 (f)(2)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (f)(2)(i) of the section, you must then conduct an 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) If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (2) of this section, you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan as required 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 COMS or BLDS.

(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visible 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 visible 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 CMS to record the temperature of the exhaust gases from the kiln and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln 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 and alkali bypass, if applicable, at the inlet to the kiln and/or alkali bypass PMCD.

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

(4) Calculate the rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. See § 63.1349(b)(3).

(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 three hours of process operation. See § 63.1349(b)(3).

(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 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.

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) Performance tests on alkali bypass and coal mill stacks must be conducted using Method 25A in appendix A to 40 CFR part 60 and repeated annually.

(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 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 (PS 12A) of appendix B to part 60 of this chapter or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to part 60 of this chapter. You must monitor mercury continuously according to paragraphs (k)(1) through (5) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.

(1) You must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of $5 \mu\text{g}/\text{m}^3$ of total mercury or higher level if necessary to include Hg concentrations which may occur (excluding concentrations during in-line raw "mill off" operation). As specified in PS 12A, Section 6.1.1, the data recorder output range must include the full range of expected Hg concentration values which would include those expected during "mill off" conditions. Engineering judgments made and calculations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records.

(2) In order to quality assure data measured above the span value, you must use one of the two options in paragraphs (k)(2)(i) and (ii) of this section.

(i) Include a second span that encompasses the Hg emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of $5 \mu\text{g}/\text{m}^3$ of total mercury. The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required.

(ii) Quality assure any data above the span value established in paragraph (k)(1) of this section using the following procedure. Any time two consecutive one-hour average measured concentration of Hg exceeds the span value you must, within 24 hours before or after, introduce a higher, "above span" Hg reference gas standard to the Hg CEMS. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1, must be of a concentration level between 50 and 150 percent of the highest hourly concentration measured during the period of measurements above span, and must be introduced at the probe. Record and report the results of this procedure as you would for a daily calibration. The "above span" calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20 percent of the certified value of the reference gas, then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the "above span" calibration for reporting based on the Hg CEMS response to the reference gas as shown in equation 19:

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} \times \text{Measured stack gas result} \quad (\text{Eq. 19})$$

= Normalized stack gas result

Only one 'above span' calibration is needed per 24 hour period.

(3) You must operate and maintain each Hg CEMS or an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, you may apply the appropriate exception for sorbent trap section 2 breakthrough in (k)(3)(i) through (iv) of this section:

- (i) For stack Hg concentrations $>1 \mu\text{g/dscm}$, $\leq 10\%$ of section 1 mass;
- (ii) For stack Hg concentrations $\leq 1 \mu\text{g/dscm}$ and $>0.5 \mu\text{g/dscm}$, $\leq 20\%$ of section 1 mass;
- (iii) For stack Hg concentrations $\leq 0.5 \mu\text{g/dscm}$ and $>0.1 \mu\text{g/dscm}$, $\leq 50\%$ of section 1 mass; and
- (iv) For stack Hg concentrations $\leq 0.1 \mu\text{g/dscm}$, no breakthrough criterion assuming all other QA/QC specifications are met.

(4) Relative accuracy testing of mercury monitoring systems under PS 12A, PS 12B, or Procedure 5 must be conducted at normal operating conditions. If a facility has an inline raw mill, the testing must occur with the raw mill on.

(5) If you use a Hg CEMS or an integrated sorbent trap monitoring system, 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 (10) of this section. If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through separate stacks, you must account for the mercury emitted from those stacks by following the procedures in (k)(5)(i) through (iv) of this section:

- (i) Develop a mercury hourly mass emissions rate by conducting annual performance tests using Method 29, or Method 30B, to measure the concentration of mercury in the gases exhausted from the alkali bypass and coal mill.
- (ii) On a continuous basis, determine the mass emissions of mercury in lb/hr from the alkali bypass and coal mill exhausts by using the mercury hourly emissions rate, the exhaust gas flow rate and hourly mercury emission rate to calculate hourly mercury emissions in lb/hr.
- (iii) Sum the hourly mercury emissions from the kiln, alkali bypass and coal mill to determine total mercury emissions. Using hourly clinker production, calculate the hourly emissions rate in pounds per ton of clinker to determine your 30 day rolling average.
- (iv) If mercury emissions from the coal mill are below the method detection limit for two consecutive annual performance tests, you may reduce the frequency of the performance tests of coal mills to once every 30 months. If the measured mercury concentration exceeds the method detection limit, you must revert to testing annually until two consecutive annual tests are below the method detection limit.

(6) If you operate an integrated sorbent trap monitoring system conforming to PS 12B, you may use a monitoring period at least 24 hours but no longer than 168 hours in length. You should use a monitoring period that is a multiple of 24 hours (except during relative accuracy testing as allowed in PS 12B).

(l) *HCl Monitoring Requirements.* If you are subject to an emissions limitation on HCl emissions in § 63.1343, you must monitor HCl emissions continuously according to paragraph (l)(1) or (2) and paragraphs (m)(1) through (4) of this section or, if your kiln is controlled using a wet or dry scrubber or tray tower, you alternatively may parametrically monitor SO₂ emissions continuously according to paragraph (l)(3) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.

(1) If you monitor compliance with the HCl emissions limit by operating an HCl CEMS, you must do so in accordance with Performance Specification 15 (PS 15) of appendix B to part 60 of this chapter, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to part 60 of this chapter. You must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 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 PS 15. If you install and operate an HCl CEMS in accordance with any other performance specification for HCl CEMS in appendix B to part 60 of this chapter, you must operate, maintain and quality assure the HCl CEMS using the procedure of appendix F to part 60 of this chapter applicable to the performance specification. You must use Method 321 of appendix A to part 63 of this chapter as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (l)(1)(i) and (ii) of this section apply to HCl CEMS other than those installed and certified under PS 15.

(i) You must use a span value for any HCl CEMS that represents the intended upper limit of the HCl concentration measurement range during normal inline raw “mill on” operation. The span value should be a concentration equivalent to approximately two times the emissions standard and it may be rounded to the nearest multiple of 5 ppm of HCl. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during “mill off” conditions. Engineering judgments made and calculations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records.

(ii) In order to quality assure data measured above the span value, you must use one of the two options in paragraphs (l)(1)(ii)(A) and (B) of this section.

(A) Include a second span that encompasses the HCl emission concentrations expected to be encountered during “mill off” conditions. This second span may be rounded to a multiple of 5 µg/m³ of total HCl. The requirements of the appropriate HCl monitor performance specification, shall be followed for this second span with the exception that a RATA with the mill off is not required.

(B) Quality assure any data above the span value established in paragraph (1)(1)(i) of this section using the following procedure. Any time the average measured concentration of HCl exceeds or is expected to exceed the span value for greater than two hours you must, within a period 24 hours before or after the “above span” period, introduce a higher, “above span” HCl reference gas standard to the HCl CEMS. The “above span” reference gas must meet the requirements of the applicable performance specification and be of a concentration level between 50 and 100 percent of the highest hourly concentration measured during the period of measurements above span, and must be introduced at the probe. Record and report the results of this procedure as you would for a daily calibration. The “above span” calibration is successful if the value measured by the HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then you must normalize the stack gas values measured above span as described in paragraph (l)(1)(ii)(C) below. If the “above span” calibration is conducted during the period when measured emissions are above span and there is a failure to collect the required minimum number of data points in an hour due to the calibration duration, then you must determine the emissions average for that missed hour as the average of hourly averages for the hour preceding the missed hour and the hour following the missed hour.

(C) In the event that the `above span' calibration is not successful (i.e., the HCl CEMS measured value is not within 20 percent of the certified value of the reference gas), then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the `above span' calibration for reporting based on the HCl CEMS response to the reference gas as shown in Equation 20:

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} \times \text{Measured stack gas result} \quad (\text{Eq. 20})$$

= Normalized stack gas result

Only one `above span' calibration is needed per 24-hour period.

(2) Install, operate, and maintain a CMS to monitor wet scrubber or tray tower parameters, as specified in paragraphs (m)(5) and (7) of this section, and dry scrubber, as specified in paragraph (m)(9) of this section.

(3) If the source is equipped with a wet or dry scrubber or tray tower, and you choose to monitor SO₂ emissions, monitor SO₂ emissions continuously according to the requirements of § 60.63(e) through (f) of part 60 subpart F of this chapter. If SO₂ levels increase above the 30-day rolling average SO₂ operating limit established during your performance test, you must:

(i) As soon as possible but no later than 48 hours after you exceed the established SO₂ value conduct an inspection and take corrective action to return the SO₂ emissions to within the operating limit; and

(ii) Within 60 days of the exceedance or at the time of the next compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl emissions limit and to verify or re-establish the SO₂ CEMS operating limit.

(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 (m)(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 (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 1-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 wet scrubber or tray tower 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. These requirements also apply to the sorbent injection equipment of a dry scrubber.

(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 BLDS as specified in paragraphs (m)(10)(i) through (viii) of this section.

(i) You must install and operate a BLDS for each exhaust stack of the fabric filter.

(ii) Each BLDS 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 BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 or fewer milligrams per actual cubic meter.

(iv) The BLDS sensor must provide output of relative or absolute PM loadings.

(v) The BLDS must be equipped with a device to continuously record the output signal from the sensor.

(vi) The BLDS must be equipped with an alarm system that will alert an operator automatically when an increase in relative PM 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 BLDS 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 BLDS probe or otherwise repairing the BLDS; or

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

(n) *Continuous Flow Rate Monitoring System.* You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) through (10) of this section, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions 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) [Reserved]

(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 (o)(1) through (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 emissions 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 (o) of this section and § 63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (p)(5) of this section.

(1) For each 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 (p)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 30 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 (p)(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 (p)(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 (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; 78 FR 10048, Feb. 12, 2013]

§ 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 February 12, 2013, except for the open clinker pile requirements will be September 9, 2015.

(d) The compliance date for new sources is February 12, 2013, or startup, whichever is later.

(e) The compliance date for existing sources with the requirements for open clinker storage piles in § 63.1343(c) is February 12, 2014.

[76 FR 2836, Jan. 18, 2011, as amended at 78 FR 10053, Feb. 12, 2013]

§ 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, and kilns 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, as amended at 78 FR 10053, Feb. 12, 2013]

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).
- (6) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of §§ 63.7(b) and 63.9(e) do not apply to retesting required for exceedances under this subpart.

[64 FR 31925, June 14, 1999, as amended at 78 FR 10053, Feb. 12, 2013]

§ 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)—(5) [Reserved]
 - (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) For each PM, HCl, Hg, and THC CEMS or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must submit reports to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with the EPA's reporting form output format. For each reporting period, the reports must include all of the calculated 30-operating day rolling average values derived from the CEMS or Hg sorbent trap monitoring systems.

(vii) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

(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) Reporting a failure to meet a standard due to a malfunction. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by § 63.1354(b)(9). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. 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; 78 FR 10053, Feb. 12, 2013]

§ 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 date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.

(g)(1) You must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.

(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.

(h) For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006; 75 FR 55064, Sept. 9, 2010; 78 FR 10053, Feb. 12, 2013]

Other

§ 63.1356 Sources with multiple emissions limit or monitoring requirements.

If an affected facility subject to this subpart has a different emissions 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 emissions limit or requirement and is exempt from the less stringent requirement.

[78 FR 10053, Feb. 12, 2013]

§ 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 PM and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and clinker coolers.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and clinker coolers to ensure compliance with any PM 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; 78 FR 10054, Feb. 12, 2013]

§ 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	
63.5(f)(1)-(2)	Approval of Construction/Reconstruction	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
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	Your operations and maintenance plan must address periods of startup and shutdown. See § 63.1347(a)(1).
63.6(f)(1)	Compliance with Emission Standards	No	Compliance obligations specified in subpart LLL.
63.6(f)(2)-(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)-(3)	Alternative Standard	Yes	
63.6(h)(1)	Opacity/VE Standards	No	Compliance obligations specified in subpart LLL.
63.6(h)(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]
63.6(h)(4)-(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)-(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)-(14)	Extension of Compliance	Yes	
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	

Citation	Requirement	Applies to subpart LLL	Explanation
63.7(a)(1)-(3)	Performance Testing Requirements	Yes	§ 63.1349 has specific requirements.
63.7(b)	Notification period	Yes	Except for repeat performance test caused by an exceedance. See § 63.1353(b)(6)
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	
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	

Citation	Requirement	Applies to subpart LLL	Explanation
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of performance test	Yes	Except for repeat performance test caused by an exceedance. See § 63.1353(b)(6)
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)(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	

Citation	Requirement	Applies to subpart LLL	Explanation
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).
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, as amended at 78 FR 10054, Feb. 12, 2013]

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

**Addendum to the Technical Support Document (TSD) for a
Part 70 Significant Source and Significant Permit Modification**

Source Background and Description

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County, Silver Creek Township
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012
Significant Source Modification No.:	019-33281-00008
Significant Permit Modification No.:	019-33403-00008
Permit Reviewer:	David Matousek

On September 19, 2013, the Office of Air Quality (OAQ) had a notice published in the Evening News in Jeffersonville, Indiana, stating that ESSROC Cement Corporation had applied to install a sulfur dioxide control system on Kiln #2 in order to comply with U.S. EPA Consent Decree No. 2:11-cv-01650-DSC, which was published in the Federal Register on January 5, 2012. This sulfur dioxide control system consists of a sorbent injection system and dry sorbent storage silo. The notice also stated that the OAQ proposed to issue a Significant Source and Permit Modification for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On September 22, 2013, Mr. John Groan submitted comments to IDEM, OAQ on the draft Significant Source and Permit Modification. Mr. Groan's comments and IDEM's response follow.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

I live in the vicinity and think this is a big move forward. What will emissions be after the plant is modified? Will it make the emissions meet standards? How much will the emissions be reduced?

Response to Comment 1:

The emission calculations included as Appendix A to the TSD indicate there will be a small increase in the emissions of particulate matter (PM), particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2.5 microns (PM_{2.5}). The increase in PM/PM₁₀/PM_{2.5} emissions are due to fugitive dust from delivery trucks, the transfer of dry sorbent to the storage silo from these trucks and increased usage of the kiln. There will be a significant decrease in sulfur dioxide (SO₂) emissions from Kiln #2. All other pollutants will remain unchanged. The following table is an estimate of the percent change in emissions after this project using the 2012 Air Emission Statement Certification submitted by ESSROC to IDEM on June 27, 2013:

Pollutant	2012 Entire Source Emissions	Project Emissions	Post Project Emissions	% Change
PM	1,179 tons/year	7.99 tons/year	1,187 tons/year	0.7%
PM ₁₀	517 tons/year	5.40 tons/year	522 tons/year	1%
PM _{2.5}	215 tons/year	4.94 tons/year	220 tons/year	2%
NO _x	1,144 tons/year	0.0 tons/year	1,144 tons/year	0%
SO ₂	1,806 tons/year	-1,216 tons/year	590 tons/year	- 67%
VOC	62.7 tons/year	0.0 tons/year	62.7 tons/year	0%
CO	4,055 tons/year	0.0 tons/year	4,055 tons/year	0%

The anticipated reduction in sulfur dioxide was estimated by IDEM as shown below:

2012 Actual Emission of SO₂

Kiln #2 Preheater Emissions in 2012 (tons SO₂ emitted in 2012) = 1,806 TPY
 Clinker Throughput (tons clinker in 2012) = 693,874 TPY
 SO₂ emission rate (lb SO₂ / ton clinker) = 5.2 lb SO₂ / ton clinker

Estimated 2012 Emissions at New Emission Rate

New SO₂ emission rate (lb SO₂ / ton clinker) = 1.7 lb SO₂ / ton clinker
 Clinker Throughput (tons clinker in 2012) = 693,874 TPY
 Estimated Reduced Kiln #2 Preheater Emissions in 2012 = 590 TPY

The estimated reduction in SO₂ emissions based on 2012 production numbers is 1,216 tons or a reduction of 67%. The new SO₂ standard is much lower than the emission limitations contained in the current permit. The standards for PM/PM₁₀/PM_{2.5} are the same. Emission statements may be viewed online at <http://www.in.gov/idem/airquality/2507.htm>.

Compliance with the PM/PM₁₀/PM_{2.5} and SO₂ emission limitations are ensured with the use of a continuous emission monitoring system (CEMS) for SO₂ and a continuous opacity monitoring system (COMS) to measure opacity, an indicator of particulate emissions. These instruments are capable of determining compliance with emission limitations in real time and ESSROC is required to operate these monitors at all times. ESSROC must also properly maintain and regularly test both the CEMS and COMS.

In addition, IDEM air compliance inspectors conduct inspections of permitted sources and respond to complaints. The air inspector for ESSROC Cement Corporation is Martin Yeates. He may be contacted at (317) 234-1300. Environmental complaints may also be filed on-line at www.idem.IN.gov/5274.html or by calling IDEM's Complaint Coordinator at (800) 451-6027, extension 2-4464.

No changes to the draft permit are required because of these comments.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

- (a) IDEM, OAQ is correcting the emission unit list to indicate that the units associated with the quarry operations are no subject to 40 CFR 63, Subpart LLL. 40 CFR 63.1340(c) states, "Onsite sources that are subject to standards for nonmetallic mineral processing plants in subpart OOO, part 60 of this chapter are not subject to this subpart [40 CFR 63, Subpart LLL]." IDEM OAQ has received verification from the U.S. Environmental

Protection Agency that 40 CFR 63, Subpart LLL, was not intended to apply to any emission unit of a type that is regulated under Subpart OOO, even if the unit is not subject to Subpart OOO because it was constructed prior to the applicability date of Subpart OOO.

The following emission units are of a type that is regulated under 40 CFR 60, Subpart OOO, but predate the regulation and are not subject to Subpart OOO, and are also not subject to Subpart LLL under 40 CFR 63.1340(c): EU03, EU05, EU06, EU07, EU78, EU80, EU83, EU85, EU86, EU87, EU89, EU91, EU93, EU94 EU96, EU97. All references to Subpart LLL have been removed for these emission units. Revisions are shown below:

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:

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78, constructed in 1948, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80, with emissions uncontrolled, commenced before 1956. ~~[40 CFR 63, Subpart LLL]~~

- (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. ~~[40 CFR 63, Subpart LLL]~~

- (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. ~~[40 CFR 63, Subpart LLL]~~

- (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. ~~[40 CFR 63, Subpart LLL]~~
- (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. ~~[40 CFR 63, Subpart LLL]~~

- (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. ~~[40 CFR 63, Subpart LLL]~~
- (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. ~~[40 CFR 63, Subpart LLL]~~
- (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. ~~[40 CFR 63, Subpart LLL]~~
- (25) Stone conveyor transfer to truck, identified as EU87, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~
- (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89, constructed in 1956, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~
- (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91, constructed in 1956, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~
- (28) One (1) truck unloading station to truck dump hopper, identified as EU93, constructed in 1956, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~
- (29) One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94, constructed in 1956, with emissions uncontrolled. ~~[40 CFR 63, Subpart LLL]~~

- (32) One (1) truck dump hopper, identified as EU96, constructed in 1977, with emission uncontrolled. ~~[40 CFR 63, Subpart LLL]~~
- (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. ~~[40 CFR 63, Subpart LLL]~~

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

- (a) *****
- (b) The IDEM, OAQ has made the following determinations regarding this source:
 - (1) *****
 - (2) *****
 - (3) None of the quarry activities, raw material stockpile operations (**except EU99 and EU102**), 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. *****

SECTION F.2 FACILITY OPERATION CONDITIONS – NESHAP, Subpart LLL

Emission Units:

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

Raw Material Stockpile Operations

(4) — ~~Raw material (clay overburden) unloading to strippings stockpile, identified as EU78~~

Raw Material Sizing Operations

(12) — ~~Raw material unloading to stone surge pile or primary crusher, identified as EU80~~

(15) — ~~One (1) covered conveyor belt for transferring stone from primary crusher to screens, identified as EU83~~

(18) — ~~Covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass, identified as EU03~~

(20) — ~~One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05~~

(21) — ~~One (1) covered conveyor for transferring material from stone ladder and tertiary crusher to traveling belt, identified as EU85~~

(22) — ~~One (1) traveling belt for transferring material from covered conveyor to North and South stone bins, 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 or truck dump hopper, identified as EU94~~

(32) — ~~One (1) truck dump hopper, identified as EU96~~

(33) — ~~One (1) limestone conveyor for transferring limestone from the truck dump hopper to the main limestone storage pile, identified as EU97~~

F.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the emission units identified as ~~EU03, EU05~~EU08 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU62, EU66 through 69, EU74, ~~EU78, EU80, EU83, EU85~~ through EU87, EU89, EU91, EU93, ~~EU94, EU96, EU97~~, EU99, EU102, EU105 through EU109, EU113 through EU115, EU117 through 127, EU129, EU131, EU132, EU135, EU149 through EU151, and EU153 through 158, except when otherwise specified in 40 CFR 63, Subpart LLL.

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

(d) *****

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered ~~EU03, EU05 through EU07, EU09 through EU12, EU14 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU54, EU56, EU57, EU59 through EU62, EU66, EU67, EU74, EU78, EU80, EU83, EU85 through EU87, EU89, EU91, EU93, EU94, EU96, EU97, EU99, EU102, EU105 through 109, EU114, EU119, EU120, EU123 through EU127, EU129, EU131, EU132, EU135, EU151, EU154, and EU156 through EU158~~ are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on September 9, 2015:

IDEM Contact

- (a) Questions regarding this Significant Source Modification and proposed Significant Permit Modification can be directed to David Matousek at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8253 or toll free at 1-800-451-6027 extension 2-8253.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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

**Technical Support Document (TSD) for a Part 70
Significant Source and Significant Permit Modification**

Source Description and Location

Source Name:	ESSROC Cement Corporation
Source Location:	301 Highway 31, Speed, Indiana 47172
County:	Clark County, Silver Creek Township
SIC Code:	3241 (Hydraulic Cement)
Operation Permit No.:	T 019-26989-00008
Operation Permit Issuance Date:	June 28, 2012
Significant Source Modification No.:	019-33281-00008
Significant Permit Modification No.:	019-33403-00008
Permit Reviewer:	David Matousek

Source Definition

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

ESSROC Cement Corporation, Plant Id # 019-00008, located at 301 Highway 31, Speed, IN 47172.

IDEM has determined that Hanson Aggregates Midwest Inc. - Aggrock Quarries, Plant Id # 019-05017, 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.

Existing Approvals

The source was issued Part 70 Operating Permit No. T 019-26989-00008 on June 28, 2012. The source has since received the following approvals:

- (a) First Significant Permit Modification No. 019-31269-00008, issued on August 9, 2012.

County Attainment Status

The source is located in Clark County, Silver Creek Township.

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. Basic nonattainment designation effective April 5, 2005, for PM_{2.5}.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. 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}, SO₂, and NO_x emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3. 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, NO₂ and 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.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	Greater than 100
PM ₁₀	Greater than 100
PM _{2.5}	Greater than 100
SO ₂	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO _x	Greater than 100
GHGs as CO ₂ e	Greater than 100,000

HAPs	Emissions (ton/yr)
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

HAPs	Emissions (ton/yr)
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
Total HAPs	Greater than 25

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, emissions of GHGs are equal to or greater than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is a major stationary source, under emission offset rules (326 IAC 2-3) since direct PM_{2.5} and/or SO₂ is emitted at a rate of 100 tons per year or more.
- (c) These emissions are based upon the Technical Support Document for Part 70 Operating Permit Renewal T 019-26989-00008.

This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by ESSROC Cement Corporation on June 6, 2013, relating to the installation of a sulfur dioxide control system on kiln #2 in order to comply with U.S. EPA Consent Decree No. 2:11-cv-01650-DSC. This sulfur dioxide control system consists of a sorbent injection system and dry sorbent storage silo. The following is a list of the proposed and modified emission units and pollution control devices:

- (a) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) unit to control its NO_x emissions, and approved in 2013 to install a dry sorbent injection system to control SO₂ emissions, 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), equipped with an SO₂ and NO_x CEMS, and exhausting to stacks S-15 and S-16, respectively. [40 CFR 63, Subpart LLL]

- (b) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
EPN17	Sorbent Silo	121	to be determined	1,024	70

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

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

The following table is used to determine the appropriate permit level 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.

Total PTE Increase due to the Modification			
Pollutant	PTE New Emission Units (ton/yr)	Net Increase to PTE of Modified Emission Units (ton/yr)	Total PTE for New and Modified Units (ton/yr)
PM	43,819.19	3.66	43,823
PM ₁₀	28,208.90	3.66	28,213
PM _{2.5}	28,208.44	3.66	28,212
SO ₂	0.00	0.00	0.00
VOC	0.00	0.00	0.00
CO	0.00	0.00	0.00
NO _x	0.00	0.00	0.00
HAPs	0.00	0.00	0.00

This source modification is subject to 326 IAC 2-7-10.5(g), because the modification has a potential to emit greater than twenty-five (25) tons per year of PM, PM₁₀, and PM_{2.5}. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification includes a case-by-case determination of an emission limitation.

Permit Level Determination – PSD and Emission Offset

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

New Units	New Units - Potential to Emit (Limited) (TPY)							
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHG (CO ₂ e)
Sorbent Storage EU159	1.13	1.13	1.13	0.00	0.00	0.00	0.00	0.00
Fugitive Dust/ Sorbent Trucks	3.20	0.61	0.15	0.00	0.00	0.00	0.00	0.00
Total	4.33	1.74	1.28	0.00	0.00	0.00	0.00	0.00

Existing/Affected Units	Existing/Affected Units - Actual Emissions (TPY)							
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHG (CO ₂ e)
kiln #2 Baseline Actual Emissions	12.56	12.56	12.56	0.00	0.00	0.00	0.00	0.00
kiln #2 Projected Actual Emissions	16.22	16.22	16.22	0.00	0.00	0.00	0.00	0.00
ATPA Increase	3.66	3.66	3.66	0.00	0.00	0.00	0.00	0.00

Hybrid Test	Hybrid Test (TPY)							
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHG (CO ₂ e)
PTE of New Units	4.33	1.74	1.28	0.00	0.00	0.00	0.00	0.00
ATPA Increase for Existing/Affected Units	3.66	3.66	3.66	0.00	0.00	0.00	0.00	0.00
Project Emissions Increase	7.99	5.40	4.94	0.00	0.00	0.00	0.00	0.00
Significant Levels	25	15	10	0.00	0.00	0.00	0.00	0.00

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual (ATPA) test in 326 IAC 2-2-2 or 2-3-2 this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1 and/or Emission Offset under 326 IAC 2-3-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8 and/or Applicability in 326 IAC 2-3-2.

Since the unrestricted potential to emit PM and PM₁₀ of this modification are greater than 25 and 15 tons per year, respectively, this source has elected to limit the potential to emit PM and PM₁₀ from the sorbent silo, to ensure the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) do not apply to this modification. Also, since the unrestricted potential to emit PM_{2.5} of this modification is greater than 10 tons per year, this source has elected to limit the potential to emit PM_{2.5} from the sorbent silo, to ensure the requirements of 326 IAC 2-3 (Emission Offset (EO)) do not apply to this modification. The PM₁₀ and PM_{2.5} limits proposed are based on 1.13 tons per year of PM₁₀ and PM_{2.5} emissions using 43,800 tons of sorbent per year. This equates to 0.0516 lb PM₁₀/PM_{2.5} per ton of sorbent. The limit for PM is identical to the limits for PM₁₀ and PM_{2.5} and it also ensures compliance with 326 IAC 6.5. The proposed limits are shown below:

- (a) Throughput of sorbent material in the sorbent silo shall not exceed 43,800 tons per twelve month period with compliance determined at the end of each month.
- (b) PM emissions from the sorbent silo shall not exceed 0.0516 lb PM per ton of sorbent material loaded into the silo, after control.
- (c) PM₁₀ emissions from the sorbent silo shall not exceed 0.0516 lb PM₁₀ per ton of sorbent material loaded into the silo, after control.
- (d) PM_{2.5} emissions from the sorbent silo shall not exceed 0.0516 lb PM_{2.5} per ton of sorbent material loaded into the silo, after control.

Compliance with the above limits, and the proposed increased utilization of kiln #2, shall ensure PM, PM₁₀, and PM_{2.5} emissions will be less than 25 tons per year, 15 tons per year and 10 tons per year, respectively, and will render the requirements of PSD and EO not applicable to the project proposed under significant source modification number 019-33281-00008.

In addition, IDEM, OAQ is updating the PSD minor limits contained in existing Condition D.1.1, D.2.1 and D.3.1 to provide clarification. These limits were originally incorporated in Part 70 Operating Permit T019-6016-00008. The revised emission limitations are shown below:

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1982 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 1.08 lb/hr, after control.
- (b) PM₁₀ emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 0.65 lb/hr, after control.
- (c) The number of holes drilled by the quarry drilling process shall not exceed 38,000 per twelve consecutive month period with compliance determined at the end of each month.
- (d) Particulate matter (PM) emissions shall not exceed 1.3 lb/quarry hole drilled.

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1985 and 1998/1999 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU74 (warehouse conveyor system for conveying bagged cement) shall not exceed 4.58 lb/hr, after control.
- (b) Combined particulate matter (PM) emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 4.53 lb/hr, after control.
- (c) Combined PM₁₀ emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 2.71 lb/hr, after control.
- (d) Particulate matter (PM) emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 1.15 lb/hr, after control.
- (e) PM₁₀ emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 0.69 lb/hr, after control.

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1994 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 5.68 lb/hr, after control.
- (b) PM₁₀ emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 3.40 lb/hr, after control.
- (c) Particulate matter (PM) emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.27 lb/hr, after control.
- (d) PM₁₀ emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.16 lb/hr, after control.
- (e) Particulate matter (PM) emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 3.65 lb/hr, after control.
- (f) PM₁₀ emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 2.19 lb/hr, after control.
- (g) Particulate matter (PM) emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.68 lb/hr, after control.
- (h) PM₁₀ emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.41 lb/hr, after control.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

40 CFR 60, Subpart F (Standards of Performance for Portland Cement Plants)

- (a) The kilns, clinker coolers, raw mill systems, finish mill systems, raw mill dryers, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems constructed after August 17, 1971, are subject to the Standards of Performance for Portland Cement Plants (40 CFR 60.60, Subpart F), which is incorporated by reference as 326 IAC 12. This source is also subject to 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry). The following emission units are subject to the requirements of 40 CFR 60, Subpart F:

Miscellaneous Facilities

- (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. [40 CFR63, Subpart LLL]

Finish Product 501-Silos Storage and Packing Facilities

- (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. [40 CFR63, Subpart LLL]

Kiln #2 Clinker Handling Facilities

- (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. [40 CFR63, Subpart LLL]
- (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. [40 CFR63, Subpart LLL]
- (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. [40 CFR63, Subpart LLL]

Clinker Handling to Crane Storage Facilities

- (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. [40 CFR63, Subpart LLL]

- (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. [40 CFR63, Subpart LLL]

2ABC Finish Mill Facilities

- (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. [40 CFR63, Subpart LLL]

2D Finish Mill Facilities

- (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.
[40 CFR63, Subpart LLL]

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.[40 CFR63, Subpart LLL]
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled. [40 CFR63, Subpart LLL]
- (110) Two (2) silos for fly ash, identified as EU10 and EU11, with emissions controlled by two (2) baghouses, constructed in 1977, identified as baghouse 228 exhausting to stack EP09, and baghouse 35363 exhausting to stack EPN12.
[40 CFR63, Subpart LLL]
- (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 fly ash tank baghouse) and exhausting to stack EPN12.
[40 CFR63, Subpart LLL]
- (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 fly ash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively. [40 CFR63, Subpart LLL]
- (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.[40 CFR63, Subpart LLL]
- (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.
[40 CFR63, Subpart LLL]

- (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. [40 CFR63, Subpart LLL]

The Kiln #1 and Kiln #2 Facilities

- (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. [40 CFR63, Subpart LLL]
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) to control its NOx emissions, 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. [40 CFR63, Subpart LLL]

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. [40 CFR63, Subpart LLL]

Pursuant to 40 CFR 60.62(d), an affected source subject to both Subpart F and another subpart, for the same pollutant, must comply with the most stringent emissions limit or requirement.

Unmodified Kilns Constructed June 16, 2008 and earlier	NSPS Subpart F	NESHAP Subpart LLL
PM	None	0.07 lb/ton clinker
NOx	None	None
SO ₂	None	None
Opacity	None	None

Unmodified Clinker Coolers Constructed June 16, 2008 and earlier	NSPS Subpart F	NESHAP Subpart LLL
PM	None	0.07 lb/ton clinker
NOx	None	None
SO ₂	None	None
Opacity	None	None

All other affected facilities other than kilns & clinker coolers	NSPS Subpart F	NESHAP Subpart LLL
Opacity	Less than 10%	Less than 10%

Since the requirements under 40 CFR 63, Subpart LLL are equal or more restrictive, the Permittee will continue to comply with Subpart LLL.

**40 CFR 60, Subpart Y
(Standards of Performance for Coal Preparation and Processing Plants)**

- (b) This subpart applies to affected facilities located at coal preparation and processing plants that process more than 200 tons of coal per day. This source remains subject to this subpart. The affected facilities at this source include the following:

Coal Handling, Milling and Storage Facilities

- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]

Nonapplicable portions of the NSPS will not be included in the permit. The source is subject to the following portions of the NSPS:

- 40 CFR 60.250(a);
40 CFR 60.251;
40 CFR 60.252(a), (a)(1) and (2);
40 CFR 60.254(a);
40 CFR 60.255(a);
40 CFR 60.256(a), (a)(1), (a)(1)(i), (a)(2);
40 CFR 60.257(a), (b)(1) through (5); and
40 CFR 60.258(b), (b)(2) and (3), (c), and (d).

**40 CFR 60, Subpart HH
Standards of Performance for Lime Manufacturing Plants**

- (c) The provisions of this subpart are applicable to each rotary lime kiln used in the manufacture of lime, for which construction or modification occurs after May 3, 1977. A lime manufacturing plant is defined as any plant that uses a rotary lime kiln to produce lime product, calcitic lime, dolomitic lime, and dead-burned dolomite from limestone by calcination. The kilns used at this do not meet the definition of rotary lime kilns; therefore, this subpart does not apply to this source.

**40 CFR 60, Subpart LL
(Standards of Performance for Metallic Mineral Processing Plants)**

- (d) The provisions of this subpart apply to each crusher and screen in open-pit mines, each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, railcar unloading station at the mill or concentrator. This source is not subject to Subpart LL because it is not a metallic mineral processing plant that produces metallic mineral concentrates from ore.

40 CFR 60, Subpart NN

(Standards of Performance for Phosphate Rock Plants)

- (e) This subpart applies to phosphate rock plants with a maximum plant production capacity of 4 tons/hr. Phosphate rock including fluorapatite, hydroxylapatite, chlorapatite, and carbonateapatite ore minerals are not processed in this facility. Therefore, this subpart does not apply.

40 CFR 60, Subpart OOO

(Standards of Performance for Nonmetallic Mineral Processing Plants)

- (c) This subpart applies to affected facilities located at nonmetallic mineral processing plants constructed, modified, or reconstructed after August 31, 1983. Where a nonmetallic mineral processing plant is any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, asphalt concrete plants, portland cement plants or any other facility processing nonmetallic minerals. This source is a portland cement plant that processes a nonmetallic mineral. However, all affected units located at this source were constructed prior to August 31, 1983. Therefore, this subpart does not apply.

40 CFR 60, Subpart UUU

(Standards of Performance for Calciners and Dryers in Mineral Industries)

- (d) This subpart applies to calciners and dryers located at mineral processing plants. Where a mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (> 50%) is any of the following minerals or a combination of these minerals:

- 1) alumina;
- 2) ball clay;
- 3) bentonite;
- 4) diatomite;
- 5) feldspar;
- 6) fire clay;
- 7) fuller's earth;
- 8) gypsum;
- 9) industrial sand;
- 10) kaolin;
- 11) lightweight aggregate;
- 12) magnesium compounds;
- 13) perlite;
- 14) roofing granules;
- 15) talc;
- 16) titanium dioxide; and
- 17) vermiculite.

This subpart does not apply to this source; because, it does not meet the definition of a mineral processing plant.

NESHAP:

**40 CFR 63, Subpart LLL
(National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry)**

- (e) This source is still subject to the requirements of 40 CFR 63.1340, Subpart LLL, which is incorporated by reference as 326 IAC 20-27.

On July 18, 2012, the U.S. EPA proposed amendments to the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and the Standards of Performance for Portland Cement Plants. This action promulgated amendments with respect to issues on which it granted reconsideration on May 17, 2011. These amendments addressed the remand of NESHAP LLL for the Portland Cement Industry by the U. S. Court of Appeals on December 9, 2011, and set a compliance date for the existing rules to September 9, 2015. This rule became effective on February 12, 2013.

The February 12, 2013 rule retained the stack emission standards for mercury, hydrogen chloride (HCL), and total hydrocarbons (THC) and amended the particulate matter (PM) standard under NESHAP LLL. The amendments included provisions for commingled HAP emissions from coal mills that are an integral part of the kiln, established a continuous monitoring regime for parametric monitoring of PM, set work standards for startup and shutdown, and revised the compliance date for the PM, mercury, HCL, THC and clinker storage pile existing source standards. The EPA also retained the affirmative defense for civil penalties for violations of emission limits occurring as a result of a malfunction.

Pursuant to 40 CFR 63.1351, the following is a list of effective dates for 40 CFR 63, Subpart LLL, reflecting the February 12, 2013 revisions:

- (1) The compliance date for any existing affected sources subject to any rule requirements that were in effect before December 20, 2006:
 - (a) is June 14, 2002 for sources that commenced construction on or before March 24, 1998.
 - (b) is June 14, 1999 for sources that commenced construction after March 24, 1998.
- (2) The compliance date for any affected existing source subject to any rule requirements that became effective on December 20, 2006:
 - (a) is startup for sources that commenced construction after December 20, 2006.
 - (b) is December 21, 2009 for sources that commenced construction after December 2, 2005 and before or on December 20, 2006.
- (3) The compliance date for existing sources for all of the requirements that became effective on February 12, 2013 is September 9, 2015, except for the clinker piles which have a compliance date of February 12, 2014.
- (4) The compliance date for new sources is February 12, 2013, or startup, whichever is later.
- (5) The compliance date for existing sources with the requirements for open clinker storage piles is February 12, 2014.

This source is subject to following versions of 40 CFR 63, Subpart LLL, as amended or revised as follows:

- (1) 64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002 (Permit Attachment B);
- (2) 64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006 (Permit Attachment C); and
- (3) 64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013 (Permit Attachment D).

All affected units constructed on or before December 2, 2005 are subject to the version of Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002]. These units remain subject until the compliance date of the February 12, 2013 rules. The emission units subject to the rule in effect prior to December 20, 2006 are:

Emission Units Subject to Pre-December 20, 2006 Rule

Miscellaneous Facilities

- (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. [40 CFR 63, Subpart LLL]

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

Finish Operations Crane Storage Facilities

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

Kiln #2 Clinker Handling Facilities

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

Raw Mill Facilities

- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (110) Two (2) silos for fly ash, identified as EU10 and EU11, with emissions controlled by two (2) baghouses, constructed in 1977, 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 fly ash tank baghouse) and exhausting to stack EPN12. [40 CFR 63, Subpart LLL]
- (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 fly ash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

Coal Handling, Milling and Storage Facilities

- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y] [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) to control its NOx emissions, 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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered EU9 to EU12, EU14 to EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU51, EU53, EU54, EU56, EU59, EU60 through 62, EU68, EU69, EU74, EU105, EU106, EU109, EU114, EU119, EU120, EU123, EU124, EU131, EU132, EU135, EU146, EU149 through 151, and EU153 are subject to the following portions of 40 CFR 63, Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002] until September 9, 2015:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342(a), (b) Table 1: Lines 1, 2, 4, 5, and 7;
- 4) 40 CFR 63.1343(a), (b), and (d);
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1345;
- 7) 40 CFR 63.1347;
- 8) 40 CFR 63.1348;
- 9) 40 CFR 63.1349(a), (b)(1)(i) to (v), (b)(2), (b)(3)(i) to (vi) (b)(4);
- 10) 40 CFR 63.1349(c), (d), (e) and (f);
- 11) 40 CFR 63.1349(f) Table 1: Lines 1, 2, 3, 5, 6, 7 and 8;
- 12) 40 CFR 63.1350(a), (b), (c)(1) and (3), (d)(1) and (3);
- 13) 40 CFR 63.1350(e), (f), (g), (h) to (m)
- 14) 40 CFR 63.1350(n) Table 1: Lines 1, 2, 3, 4, 6, 7, and 9
- 15) 40 CFR 63.1351;
- 16) 40 CFR 63.1352;
- 17) 40 CFR 63.1353;
- 18) 40 CFR 63.1354;
- 19) 40 CFR 63.1355;
- 20) 40 CFR 63.1356(a)(1), (b);
- 21) 40 CFR 63.1357;
- 22) 40 CFR 63.1358; and
- 23) Table 1 to Subpart LLL.

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

All affected sources constructed after December 2, 2005 are subject to the version of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006]. These units remain subject until the compliance date of the rule published on February 12, 2013. The emission units subject to the rule in effect on December 20, 2006 are:

Emission Units Subject to December 20, 2006 Rules

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.
[40 CFR 63, Subpart LLL]

Raw Mill Facilities

- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled. [40 CFR 63, Subpart LLL]

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]

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered EU156, EU157 and EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006] until September 9, 2015:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1348;
- 5) 40 CFR 63.1349(a) and (b)(2);
- 6) 40 CFR 63.1350(a), (j), and (l);
- 7) 40 CFR 63.1350 Table 1: Lines 1, and 9;
- 8) 40 CFR 63.1351(b);
- 9) 40 CFR 63.1353;
- 10) 40 CFR 63.1354(a), (b)(1) to (6), (b)(9)(v);
- 11) 40 CFR 63.1355(a), (b), (c), and (f);
- 12) 40 CFR 63.1357;
- 13) 40 CFR 63.1358; and
- 14) Table 1 to Subpart LLL

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

Emission Units Subject to February 12, 2013 Rules On and after February 12, 2014

All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The compliance date for the clinker piles in February 12, 2014. The following affected sources are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on February 12, 2014:

Clinker Handling to Crane Storage Facilities

- (69) One (1) clinker storage pile, identified as EU121, created before 1960.
- (70) North clinker storage pile, identified as EU122, created in May 1971.

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered EU121 and EU122 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on February 12, 2014:

- 1) 40 CFR 63.1340(a), (b)(9), (c), and (d);
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), and (c)
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1347;
- 7) 40 CFR 63.1348(d); and
- 8) 40 CFR 63.1351(e).

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

Emission Units Subject to February 12, 2013 Rules Starting on September 9, 2015

All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The following affected sources are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on September 9, 2015:

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78, constructed in 1948, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (9) Truck unloading to clay storage piles, identified as EU102, constructed in 1948, with emissions uncontrolled. [40 CFR 63, Subpart LLL]

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80, with emissions uncontrolled, commenced before 1956. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (25) Stone conveyor transfer to truck, identified as EU87, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89, constructed in 1956, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91, constructed in 1956, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (28) One (1) truck unloading station to truck dump hopper, identified as EU93, constructed in 1956, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (29) One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94, constructed in 1956, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (32) One (1) truck dump hopper, identified as EU96, constructed in 1977, with emission uncontrolled. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

Miscellaneous Facilities

- (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. [40 CFR 63, Subpart LLL]

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945. [40 CFR 63, Subpart LLL]
- (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. [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, with emissions uncontrolled, commenced before 1945. [40 CFR 63, Subpart LLL]
- (49) One (1) truck unloading station to gypsum storage piles, identified as EU129, with emissions uncontrolled, commenced before 1945. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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 one (1) baghouse, identified as baghouse 234, exhausting to one (1) stack identified as EP26. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126, constructed in May 1971, with emissions uncontrolled. [40 CFR 63, Subpart LLL]

2ABC Finish Mill Facilities

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled. [40 CFR 63, Subpart LLL]
- (110) Two (2) silos for fly ash, identified as EU10 and EU11, with emissions controlled by two (2) baghouses, constructed in 1977, identified as baghouse 228 exhausting to stack EP09, and baghouse 35363 exhausting to stack EPN12. [40 CFR 63, Subpart LLL]
- (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 fly ash tank baghouse) and exhausting to stack EPN12. [40 CFR 63, Subpart LLL]
- (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 fly ash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (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. [40 CFR 63, Subpart LLL]
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit (EU69), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) to control its NO_x emissions, 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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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. [40 CFR 63, Subpart LLL]

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]

The emission units numbered EU03, EU05 through EU07, EU09 through EU12, EU14 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU54, EU56, EU57, EU59 through EU62, EU66, EU67, EU74, EU78, EU80, EU83, EU85 through EU87, EU89, EU91, EU93, EU94, EU96, EU97, EU99, EU102, EU105 through 109, EU114, EU119, EU120, EU123 through EU127, EU129, EU131, EU132, EU135, EU151, EU154, and EU156 through EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on September 9, 2015, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), (b)(1);
- 5) 40 CFR 63.1343(b)(1) - Table 1: Lines 1, 2, 3, 7, 8, and 13;
- 6) 40 CFR 63.1343 - Table 2: (Table omitted from final rule);
- 7) 40 CFR 63.1343(c) and (d);
- 8) 40 CFR 63.1344;
- 9) 40 CFR 63.1345;
- 10) 40 CFR 63.1346(a), (b), (f), and (g)
- 11) 40 CFR 63.1347;
- 12) 40 CFR 63.1348(a), (b), (f), and (g);
- 13) 40 CFR 63.1347;
- 14) 40 CFR 63.1348 (To be determined prior to September 9, 2015);
- 15) 40 CFR 63.1349(a), (b)(1) and (b)(1)(i);
- 16) 40 CFR 63.1350(a), (b), (d)(1)(i) to (ii), and (d)(2) to (4);
- 17) 40 CFR 63.1350(f) to (l), (m) to (m)(7) to (m)(11)(vi);
- 18) 40 CFR 63.1350(n) to (n)(2), (n)(4) to (10), (o), (p);
- 19) 40 CFR 63.1351;
- 20) 40 CFR 63.1352;
- 21) 40 CFR 63.1353;
- 22) 40 CFR 63.1354(a) to (b)(3), (b)(6) to (10), (c);
- 23) 40 CFR 63.1355;
- 24) 40 CFR 63.1356;
- 25) 40 CFR 63.1357(a) to (c);
- 26) 40 CFR 63.1358; and
- 27) Table 1 to Subpart LLL.

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

40 CFR 98 (Mandatory Greenhouse Gas Reporting)

(f) The greenhouse gas reporting requirements and related monitoring, recordkeeping, and reporting requirements apply to owners and operators of any facility located in the United States, or under or attached to the Outer Continental Shelf which is listed in Table A-3 of 40 CFR 98, Subpart A. Cement production is a listed source category and this source is subject to the requirements of 40 CFR 98, Subpart A and Subpart H. This source is not subject to 40 CFR 98, Subpart U (Miscellaneous Uses of Carbonate) because 40 CFR 98.210(b) specifically excludes sources using carbonates in the manufacture of cement.

40 CFR 64 (CAM)

(g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet 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 table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis – PM, PM₁₀ and PM_{2.5}							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold	CAM Apply (Y/N)	Large Unit (Y/N)
EU27, kiln #2	Baghouse 15 and 16	YES	> 100	< 100	100 TPY	YES	YES
Sorbent Unloading & Storage, EU159	Dust Collector 38230	YES	< 100	< 100	100 TPY	NO	NO

Based on this evaluation, the requirements of 40 CFR Part 64, CAM became applicable to kiln #2 (EU27) for PM/PM₁₀/PM_{2.5} upon issuance of the Title V Renewal, T019-26989-00008, issued on June 28, 2012. The requirements of 40 CFR Part 64, CAM are not applicable to EU159, Sorbent Unloading and Storage because the potential to emit before controls of PM/PM₁₀/PM_{2.5} are less than the Part 70 Major Source Thresholds.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

**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 plantwide applicability limitation (PAL) for NO_x. The PAL permit provisions enable 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. This source does not have a PAL for SO₂.

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

Pursuant to 326 IAC 2-4.1-1(b)(2), the requirements of 326 IAC 2-4.1-1 do not apply to a major source specifically regulated, or exempt from regulation, by a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA. Kiln #1 and kiln #2 are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, which was implemented under Sections 112(d) and 111(b) of the Clean Air Act. Therefore, kiln #1 and kiln #2 are exempt from the requirements of 326 IAC 2-4.1-1.

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

Pursuant to 326 IAC 3-5-1(c)(5), portland cement plants shall monitor opacity at the following facilities: kilns and clinker coolers. The source shall install, calibrate, and maintain a continuous opacity monitoring system (COMS) for opacity for kiln #1, kiln #2, grate clinker cooler #1, and grate clinker cooler #2. Pursuant to U.S. EPA Consent Decree case 2:11-cv-01650-DSC, filed on December 29, 2011, the Permittee shall install, calibrate, maintain, and operate a NO_x and SO₂ continuous emissions monitoring system to measure NO_x and SO₂ emissions from kiln #2, its associated heater (EU69) and the alkali bypass.

326 IAC 5 (Opacity Regulations)

This rule applies to opacity, not including condensed water vapor, emitted by or from a facility or source for which specific opacity have been established in 326 IAC 6, 326 IAC 6.5, 326 IAC 6.8, 326 IAC 11, or 326 IAC 12. Kiln #2 and the sorbent silo are not subject to specific opacity limitations; therefore, 326 IAC 5-1-2(1) applies to both emission units.

- (A) Opacity shall not exceed an average of forty percent (40%) in any one (1) of six (6) minute averaging period.
- (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)

Pursuant to 326 IAC 6-3-2(c)(6), (kiln #2 constructed in 1977 is not subject to the requirements of 326 IAC 6-3-2 because this unit is subject to a more restrictive particulate matter (PM) emission limitation under 40 CFR 63, Subpart LLL. Pursuant to 326 IAC 6-3-2(c)(3), the sorbent silo, to be constructed in 2013, is not subject to the requirements of 326 IAC 6-3-2 because it is subject to a more restrictive particulate matter (PM) emission limitation under 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

ESSROC is not subject to the requirements of 326 IAC 6-5, because, even though it is located in Clark County, it is not located in Jeffersonville Township, and all sources of fugitive particulate matter (PM) constructed on or after December 13, 1985 have potential fugitive PM emissions of less than 25 tons per year. EU157 (Kreyling Hopper) and EU158 (bottom ash hopper), both were constructed in 2009 and each has a potential to emit PM of less than 5 tons per year without control.

326 IAC 6.5 (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 TPY. 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. Kiln #2 is specifically listed in 326 IAC 6.5-2-4, the combined particulate matter emissions from kiln #2 system, which includes kiln #2 equipped with an alkali bypass (EU27), the fuel oil-fired preheater (EU69), and clinker cooler #2 (EU29), shall not exceed 265.20 TPY and 0.4 pound per ton of kiln feed (dry basis).

The sorbent storage silo is subject to 326 IAC 6.5-1-2(a). Particulate Matter (PM) emissions from the sorbent storage silo shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (gr/dscf).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Kiln #2 has the potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of SO₂. Therefore, 326 IAC 7-1.1 applies to kiln #2. However, kiln #2 is subject to a more restrictive SO₂ emission limitation in accordance to a U.S. EPA Consent Decree. Therefore, kiln #2 shall comply with the consent decree and 326 IAC 7-1.1. Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, SO₂ emissions from kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU27 shall not exceed 1.7 pounds per ton of clinker produced, based on a 30-day rolling average.

Pursuant to 326 IAC 7-1.1, both kilns and associated preheaters shall comply with the following:

- (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 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.

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 modification are as follows:

Emission Unit	Parameter	Frequency
Sorbent Silo	Operation of Bin Vent Filter	At all times
Kiln #2	Operation of Sorbent Injection System	At all times

The Compliance Monitoring Requirements applicable to this modification are as follows:

Emission Unit	Parameter	Frequency	Response
Sorbent Storage Silo	Visible Emission Notations	Once per loading event	Reasonable Response Steps
Kiln #2	SO ₂	Continuous	Reasonable Response Steps

These monitoring conditions are necessary to ensure compliance with the PSD and EO minor limits for PM₁₀ and PM_{2.5}. The SO₂ CEMS is required by U.S. EPA Consent Decree.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. **T019-26989-00008**. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Changes to Section A

Modification No. 1:

General Information

IDEM, OAQ is adding the township to Original Section A.1 – General Information. The township is needed in Clark County to determine applicability of state rules. IDEM, OAQ clarified the SIC code description. IDEM, OAQ updated the source status. The revisions is shown below:

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 (Hydraulic Cement)
County Location:	Clark County, Silver Creek Township
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, under EO Rules Major Source, Section 112 of the Clean Air Act 1 of 28 listed source categories

Modification No. 2:

Section A.3 - Descriptions

IDEM, OAQ updated the emission unit descriptions in Section A.3 to reflect this source modification. IDEM, OAQ is updating all emission unit descriptions to reflect the applicability of NESHAP Subpart LLL and NSPS Subpart Y. Revisions are shown below:

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:

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78, constructed in 1948, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (5) *****
- (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. **[40 CFR 63, Subpart LLL]**
- (7) *****
- (8) *****

(9) Truck unloading to clay storage piles, identified as EU102, constructed in 1948, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**

(10) *****

(11) *****

Raw Material Sizing Operations

(12) Raw material unloading to stone surge pile or primary crusher, identified as EU80, with emissions uncontrolled, commenced before 1956. **[40 CFR 63, Subpart LLL]**

(13) *****

(14) *****

(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. **[40 CFR 63, Subpart LLL]**

(16) *****

(17) *****

(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. **[40 CFR 63, Subpart LLL]**

(19) *****

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(25) Stone conveyor transfer to truck, identified as EU87, constructed in 1956, with a nominal throughput of 700 tons per hour, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**

- (26) One (1) truck unloading station to crushed limestone storage pile, identified as EU89, constructed in 1956, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (27) One (1) truck loading station from crushed limestone storage pile, identified as EU91, constructed in 1956, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (28) One (1) truck unloading station to truck dump hopper, identified as EU93, constructed in 1956, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (29) One (1) truck unloading station to emergency limestone storage pile or truck dump hopper, identified as EU94, constructed in 1956, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (30) *****
- (31) *****
- (32) One (1) truck dump hopper, identified as EU96, constructed in 1977, with emission uncontrolled. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (34) *****

Kiln #1 Cement Kiln Dust (CKD) Operations

- (35) *****
- (36) *****
- (37) *****
- (38) *****

Kiln #2 Cement Kiln Dust (CKD) Operations

- (39) *****
- (40) *****
- (41) *****

Miscellaneous Facilities

- (42) *****
- (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. **[40 CFR 63, Subpart LLL]**

Clay Processing Operations

- (44) Clay hopper, identified as EU105, constructed prior to 1945. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(46) *****

Finish Operations Crane Storage Facilities

(47) *****

(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. **[40 CFR 63, Subpart LLL]**

(49) One (1) truck unloading station to gypsum storage piles, identified as EU129, with emissions uncontrolled, commenced before 1945. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(51) *****

Fossil Fuel Storage and Handling Facilities

(52) *****

(53) *****

(54) *****

(55) *****

(56) *****

(57) *****

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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (69) One (1) clinker storage pile, identified as EU121, created before 1960. **[40 CFR 63, Subpart LLL]**
- (70) North clinker storage pile, identified as EU122, created in May 1971. **[40 CFR 63, Subpart LLL]**
- (71) North clinker storage building, identified as EU123, constructed in 1960, with emissions controlled by baghouse 35931 and exhausting to stack EPN7. **[40 CFR 63, Subpart LLL]**

- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (75) Truck unloading station, used for loading material to the crane storage building, identified as EU126, constructed in May 1971, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**

2ABC Finish Mill Facilities

- (76) *****
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**

- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

(94) *****

(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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(104) *****

- (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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**
- (108) One (1) iron ore hopper, identified as EU109, constructed in July 1976, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (109) One (1) bottom ash hopper, identified as EU158, constructed in 2009, with emissions uncontrolled. **[40 CFR 63, Subpart LLL]**
- (110) Two (2) silos for fly ash, 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. **[40 CFR 63, Subpart LLL]**
- (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 fly ash tank baghouse) and exhausting to stack EPN12. **[40 CFR 63, Subpart LLL]**
- (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 fly ash feeder), and 35137 (C-15 west), and exhausting to stacks EP07, EPN13, and EPN10, respectively. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (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. **[40 CFR 63, Subpart LLL]**
- (115) *****
- (116) *****
- (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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(119) *****

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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 60, Subpart Y]**
[40 CFR 63, Subpart LLL]

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 60, Subpart Y]**
[40 CFR 63, Subpart LLL]

(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. **[40 CFR 60, Subpart Y][40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

(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. **[40 CFR 63, Subpart LLL]**

- (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. **[40 CFR 63, Subpart LLL]**
- (130) One (1) dry process rotary cement kiln #2 and associated preheater unit (**EU69**), equipped with an alkali bypass, identified as EU27, constructed in 1977, and approved in 2012 to install a Selective Non-Catalytic Reduction (SNCR) to control its NO_x emissions, **approved in 2013 to install a dry sorbent injection system to control its NO_x emissions**, 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. **[40 CFR 63, Subpart LLL]**
- (130a) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.**

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. **[40 CFR 63, Subpart LLL]**

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. **[40 CFR 63, Subpart LLL]**

Modification No. 3:

326 IAC 8-3-5 Repeal

326 IAC 8-3-5 (Cold cleaner degreaser operation and control) was repealed by the Air Pollution Control Board; filed January 30, 2013, 12:33 PM: 20130227-IR-326070352FRA. The emission unit description for the degreasing operations in Section A.4 has been revised to remove references to 326 IAC 8-3-5. Revisions are shown below:

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]

Changes to Section B and C

Modification No. 4:

Rule Citations

On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revisions resulted in a change to the rule citations of the "responsible official" definition and several other rule citations. These changes are not changes to the underlying provisions. The change is only to the citations of these rules. IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all timelines have been revised to "no later than" or "not later than." Changes to Section B and C as a result of this change are shown below:

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(~~3435~~), and
 - (2) *****
- (b) *****
- (c) A "responsible official" is defined at 326 IAC 2-7-1(~~3435~~).

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

- (a) *****
- (c) *****

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(~~3435~~).

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

- (a) *****
- (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) ~~within~~**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) *****
 - (2) *****
 - (3) *****

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

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(~~3435~~).

- (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(3435). *****

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

(a) *****

(b) *****

(5) *****

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(3435). *****

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(3435).

(b) *****

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(3435). *****

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

(a) *****

(b) *****

Any such application shall be certified by a "responsible official" as defined by 326 IAC 2-7-1(34). Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(a) *****

(1) *****

(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)(1) or (c)(1). The Permittee *****

(b) *****

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(3435).

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

(a) *****

(b) *****

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

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

(a) *****

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(3435).

(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(3435).

(c) *****

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

(a) *****

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(3435). *****

C.12 Risk Management Plan [326 IAC 2-7-5(4112)] [40 CFR 68]

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

(a) *****

(c) *****

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(3435).

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) *****

(2) *****

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(3435).

C.17 General Reporting Requirements *****

(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(3435). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(f) The report for project at an existing emissions unit shall be submitted ~~with~~ **no later than** sixty (60) days after the end of the year and contain the following:

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(3435). *****

D.3.225 Reporting Requirements

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(3435).

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(3435). The report shall include the following information:

Modification No. 5:

Operational Flexibility

Section B – Operational Flexibility was revised to more closely match the underlying rule. Revisions are shown below:

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

- (a) *****
- (1) *****
- (2) ~~Preconstruction approval is not required by 326 IAC 2-7-10.5~~ **Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;**
- (3) *****

Modification No. 6:

Response to Excursions or Exceedances

Condition C.13(a) applies to emission limitations not subject to CAM. IDEM, OAQ revised C.13(a) to clarify the condition.

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, **not subject to CAM**, in this permit: *****

Modification No. 7:

Emission Statement

The address of the Technical Support and Modeling Section of the Office of Air Quality was corrected. Revisions are shown below:

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) *****
- (1) *****
- (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 **MC 61-50 IGCN 1003**
Indianapolis, Indiana 46204-2251

Modification No. 8:

General Reporting Requirements

Rule citations were updated to include 326 IAC 2-3 as an underlying rule. The first sentence of Condition C.17(d) was deleted because it only applies to an initial Part 70 Operating Permit. Revisions are shown below:

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

- (a) *****
- (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. *****

Modification No. 9:

Instrument Specifications – Revision to Valid Range

IDEM, OAQ clarified original Condition C-10 to indicate that the analog instrument must be capable of measuring the parameters outside the normal range. Revisions are shown below:

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. **The analog instrument shall be capable of measuring values outside of the normal range.** *****

Modification No. 10:

General Record Keeping Requirements – Rule Clarification

IDEM, OAQ added "where applicable" to the lists in Section C – General Record Keeping Requirements to more closely match the underlying rule.

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, **where applicable:**
- (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, **where applicable:**

Changes to Section D

Modification No. 11:

Visible Emission Notations – CAM Applicability

Original Condition D.1.7– Visible Emission Notations is intended to ensure compliance with 40 CFR 64. IDEM, OAQ added a rule citation to clarify the underlying rule. Revisions are shown below:

D.1.7 Visible Emissions Notations [40 CFR 64]

Modification No. 12:

Parametric Monitoring – CAM and Operating Range

Original Conditions D.1.8, D.2.8, and D.3.17 were updated to add a rule citation for CAM applicability. Original Condition D.2.8 and D.3.17 were renumbered due to the addition of an additional condition described later in this TSD. The pressure drop range for parametric monitoring was clarified. Revisions are shown below:

D.1.8 Parametric Monitoring [40 CFR 64]

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~~**When, for any reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test.** Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.

D.2.89 Baghouse Parametric Monitoring [40 CFR 64]

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~~**When, for any reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test.** Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.3.179 Baghouse Parametric Monitoring [40 CFR 64]

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~~**When, for any reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound for this range is determined during the latest stack test.** Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. *****

Modification No. 13:

326 IAC 8-3-5 Repeal

326 IAC 8-3-5 (Cold cleaner degreaser operation and control) was repealed by the Air Pollution Control Board; filed January 30, 2013, 12:33 PM: 20130227-IR-326070352FRA. The emission unit description for the degreasing operations in the Facility Description Box in Section D.4 was updated. Original Condition D.4.2 was removed and Original Condition D.4.3 was renumbered. The requirements for compliance with 326 IAC 8-3-8 were revised to more closely match the underlying rule. Revisions are shown below:

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.)

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^oC) (one hundred degrees Fahrenheit (100^oF)), 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 or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~
- ~~(b) — Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), 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.4.32 Material Requirements for Cold Cleaning Degreasers [326 IAC 8-3-8]

- (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

- (56) the true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Modification No. 14:

Sections D.1, D.2, and D.3 Facility Description Boxes – Revised Descriptions

IDEM, OAQ is updating the facility description box in Sections D.1, D.2 and D.3 to update the reference to Section A.3. IDEM, OAQ is updating the facility description box in Section D.2 to include the sorbent injection silo and related items proposed as part of this modification. Revisions are shown below:

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.32.

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.32.

Kiln #1 and Kiln #2 Facilities

(130a) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159, with a maximum filling rate of 17 tons per hour and a maximum annual throughput of 43,800 tons per year, using a single compartment bin vent dust collector identified as 38230 for particulate control, and exhausting to stack EPN17.

Insignificant Activities: Note: Complete insignificant activity descriptions are in Section A.43.

SECTION F.2 FACILITY OPERATION CONDITIONS – NESHAP, Subpart LLL

Insignificant Activities: **Note: Complete insignificant activity descriptions are in Section A.4.**

Modification No. 15:

Section D.2.2 – PSD and EO Minor Limits

IDEM, OAQ is adding minor limits to ensure this project is not subject to the requirements of PSD and EO. Proposed emission limits are shown below:

D.2.2 Prevention of Significant Deterioration (PSD) and Emission Offset Minor Limits for PM/PM₁₀/PM_{2.5} – Sorbent Silo [326 IAC 2-2][326 IAC 2-3]

- (a) Throughput of sorbent material in the sorbent silo shall not exceed 43,800 tons per twelve month period with compliance determined at the end of each month.
- (b) PM emissions from the sorbent silo shall not exceed 0.0516 lb PM per ton of sorbent material loaded into the silo, after control.
- (c) PM₁₀ emissions from the sorbent silo shall not exceed 0.0516 lb PM₁₀ per ton of sorbent material loaded into the silo, after control.
- (d) PM_{2.5} emissions from the sorbent silo shall not exceed 0.0516 lb PM_{2.5} per ton of sorbent material loaded into the silo, after control.

Compliance with the above limits, and the proposed increased utilization of kiln #2, shall ensure PM, PM₁₀, and PM_{2.5} emissions will be less than 25 tons per year, 15 tons per year and 10 tons per year, respectively, and will render the requirements of PSD and EO not applicable to the project proposed under significant source modification number 019-33281-00008.

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.32.

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

Modification No. 16:

Paragraph Renumbering

IDEM, OAQ is renumbering original Conditions D.2.2, D.2.3, D.2.4 and D.2.5 to account for the insertion of the minor limits in Modification No. 15. Also, a 326 IAC 6.5 limit was added for the proposed sorbent silo. Revisions are shown below:

D.2.23 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.

- (o) **One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159.**

D.2.34 Particulate Emissions [326 IAC 6-3-2]

D.2.45 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

D.2.56 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.2.32 - Particulate Matter (PM) Limitations, the Permittee shall perform PM testing on baghouse 265 controlling CKD sales loadout spout (EU154).

Modification No. 17:

Use of Control Device for Sorbent Silo

IDEM, OAQ is renumbering and updating all condition references in original Condition D.2.6 to account for the addition of a new condition described in Modification No. 15. A condition requiring the use of the bin vent filter was added to ensure compliance with the PSD and EO minor limits. Revisions are shown below:

D.2.67 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.2.23 - Particulate Matter (PM), and D.2.34 - 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.

- (b) **In order to comply with Condition D.2.2, the bin vent filter for the sorbent silo shall be in operation and controlling particulate emissions at all times that the sorbent silo is in operation.**

Modification No. 18:

Sorbent Silo Compliance Monitoring Requirements

IDEM, OAQ is renumbering and adding compliance monitoring requirements for the sorbent storage silo. Also, the condition is intended to implement the requirements of 40 CFR 64. A reference has been added to the condition title. Revisions are shown below:

D.2.78 Visible Emissions Notations [40 CFR 64]

- (a) *****

- (b) **Visible emission notations of the bin vent filter for the sorbent storage silo shall be performed once, each time the silo is filled. A trained employee shall record whether emissions are normal or abnormal.**

- (cb) *****

- (de) *****

- (ed) *****

- (fe) *****

Modification No. 19:

Condition Renumbering

IDEM, OAQ is renumbering original Condition D.2.9 to account for the addition of a new condition to Section D.2. Revisions are shown below:

D.2.910 Broken or Failed Bag Detection

Modification No. 20:

Condition Renumbering

IDEM, OAQ is renumbering original Condition D.2.10 to account for the addition of a new condition to Section D.2. A requirement to maintain records and report of the amount of sorbent unloaded to the sorbent silo per twelve consecutive month period has been included. A requirement to maintain records of the visual emission notations of the bin vent filter for the sorbent silo has been included. Condition references have been updated. Revisions are shown below:

D.2.101 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.78 - 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 **or no sorbent was unloaded that day**).
- (b) To document the compliance status with Condition D.2.89 - *****
- (c) **To document the compliance status with Condition D.2.2(a), the Permittee shall maintain daily records of the date and amount of sorbent material unloaded to the sorbent silo.**
- (de) *****

D.2.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with the sorbent throughput limit specified in Condition D.2.2(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Modification No. 21:

Revised SO₂ Emission Limitations for Kiln #2

IDEM, OAQ is adding a new condition D.3.6 to include SO₂ emission limitations pursuant to the consent decree signed by ESSROC Cement Corporation and the U.S. EPA. The text of the condition is shown below:

D.3.6 Sulfur Dioxide (SO₂) Emissions Limit [U.S. EPA Consent Decree]

Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, SO₂ emissions from kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU27 shall not exceed 1.7 pounds per ton of clinker produced, based on a 30-day rolling average.

Modification No. 22:

Condition Renumbering

Original Conditions D.3.6 through D.3.9 have been renumbered because of the condition added under Modification No. 21. Revisions are shown below:

D.3.67 NO_x Emissions [326 IAC 10-1] [326 IAC 10-3]

- (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.

Compliance with the NO_x limit in Condition D.3.78 shall satisfy the NO_x limit of four and four-tenths (4.4) pounds per ton clinker produced on a thirty (30) day rolling average basis.

D.3.78 Nitrogen Oxide (NO_x) Emissions Limit [USEPA Consent Decree]

Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, the NO_x emissions from kiln #2 and associated preheater unit (**EU69**), including the alkali bypass, identified as EU27 shall not exceed 2.10 pounds per ton of clinker produced, based on a 30-day rolling average.

D.3.89 NO_x Continuous Emissions Monitoring (CEMS) Downtime

- (b) After completion of the compliance stack testing, ammonia injection into the kiln #2 preheater tower shall not exceed the rate established during the valid compliance stack test in D.3.4011(b) that corresponds with zero ammonia slip.

D.3.910 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [326 IAC 10-3]

Modification No. 23:

Condition Renumbering

IDEM, OAQ is renumbering original Conditions D.3.11, D.3.12, D.3.13, and D.3.14 to reflect the addition of new conditions. Revisions are shown below:

D.3.142 NO_x Selective Non-Catalytic Reduction (SNCR) [USEPA Consent Decree]

D.3.123 Particulate Matter (PM) Control

D.3.134 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]

D.3.145 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall determine ~~that the~~ sulfur dioxide emissions by:

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]

- (a) The Permittee shall comply with the requirements of Conditions D.3.1342(c) through (d) - Continuous Emissions Monitoring.

Modification No. 24:

SO₂ CEMS Requirements for Kiln #2

IDEM, OAQ is incorporating the requirement to use an SO₂ CEMs on the exhaust of kiln #2, pursuant to the consent decree. The condition has been renumbered to account for the addition of new permit conditions. Revisions are shown below:

D.3.156 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [326 IAC 10-1]
[326 IAC 10-3][**U.S. EPA Consent Decree**]

- (a) *****

- (b) Pursuant to the Consent Decree in United States v. ESSROC Cement Corporation No. 2:11-cv-01650-DSC, signed on February 16, 2012 and referenced in the Federal Register as No. 2:11-cv-0650-DSC, NO_x Continuous Emissions Monitoring System (CEMS) shall be installed, calibrated, maintained, and operated to demonstrate compliance with the NO_x emission limit in Condition D.3.78 for kiln #2 and associated preheater unit (**EU69**), including the alkali bypass, identified as EU027, in accordance with 326 IAC 3-5.

- (c) Pursuant to 326 IAC 10-1-6 (Emissions Monitoring) and 326 IAC 10-3 (Monitoring and Testing Requirements), NO_x CEMS shall be installed, calibrated, maintained, and operated to demonstrate compliance with the NO_x emission limits in Condition D.3.76 for kiln #1 (EU20) and kiln #2 (EU27), in accordance with 326 IAC 3-5.

- (f) Pursuant to the Consent Decree, U.S. v. ESSROC Cement Corporation, No. 2:11-cv-01650-DSC, signed on February 16, 2012, and referenced in the Federal Register as No. 2:11-cv-0650-DSC, an SO₂ Continuous Emissions Monitoring System (CEMS) shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60 and 326 IAC 3-5, to demonstrate compliance with the SO₂ emission limit in Condition D.3.6, for the combined exhaust of kiln #2, the associated heater (**EU69**) and the alkali bypass.

Modification No. 25:

Requirement to Use Sorbent System

IDEM, OAQ is adding a permit condition requiring the use of the dry sorbent injection system at all times kiln #2 is in operation. Text of the condition is shown below:

D.3.17 Dry Sorbent Injection System [U.S. EPA Consent Decree]

Pursuant to the Consent Decree, U.S. v. ESSROC Cement Corporation, No. 2:11-cv-01650-DSC, signed on February 16, 2012, and referenced in the Federal Register as No. 2:11-cv-0650-DSC, the dry sorbent injection system shall be operated at all times kiln #2 is in operation, consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the dry sorbent injection system and kiln #2.

Modification No. 26:

Condition Renumbering

Original Conditions D.3.16, D.3.18, and D.3.19 have been renumbered as a result of the insertion of new permit conditions. Revisions are shown below:

D.3.168 Visible Emissions Notations [40 CFR 64]

D.3.1820 Broken or Failed Bag Detection

D.3.1921 NO_x Continuous Emissions Monitoring (CEMS) Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Modification No. 27:

SO₂ CEMS Downtime for Kiln #2

IDEM, OAQ is adding a condition to specify the Permittee's actions during SO₂ CEMS downtime.

D.3.22 SO₂ Continuous Emissions Monitoring System (CEMS) Downtime
[U.S. EPA Consent Decree]

The SO₂ CEMS shall be in operation and measuring SO₂ emissions at all times kiln #2 is in operation, except during CEMS breakdown, repairs, calibration checks, and zero span adjustments. During any time when the SO₂ CEMS is inoperable and otherwise not measuring emissions of SO₂ from kiln #2, the Permittee shall apply the missing data procedures in 40 CFR 75, Subpart D.

Modification No. 28:

Condition Renumbering

IDEM, OAQ is renumbering original Condition D.3.20 to account for the addition of new permit conditions to the operating permit. Revisions are shown below:

D.3.203 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

Modification No. 29:

Record Keeping Requirements

IDEM, OAQ is updating condition references in original Condition D.3.21. Revisions are shown below:

D.3.214 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.5 - Sulfur Dioxide (SO₂), D.3.134 - Sulfur Dioxide Emissions and Sulfur Content and D.3.145 - *****
- (c) To document the compliance status with Section C - Opacity and Condition D.3.156 - 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.

 - (2) All continuous emissions opacity monitoring data and all continuous opacity monitoring data pursuant to 326 IAC 3-5.

- (d) To document compliance with conditions D.3.1921, *****

- (e) To document the compliance status with Condition D.3.168 - Visible*****
- (f) To document the compliance status with Condition D.3.179 - Baghouse*****

Modification No. 30:

Reporting Requirements

IDEM, OAQ is adding reporting requirements in original Condition D.3.22 due to the addition of the SO₂ CEMS. Rule references have been updated. Revisions are shown below:

D.3.225 Reporting Requirements

- (a) *****
- (g) A monthly summary of the thirty (30) day rolling average of the CEMS NO_x emissions reading for kiln #2 and associated preheater unit (EU69), *****
- (h) **A monthly summary of the thirty (30) day rolling average of the SO₂ CEMS emissions reading for kiln #2 and associated preheater unit (EU69), including the alkali bypass, identified as EU027 shall be submitted not later than thirty (30) days after the end of each half calendar year being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.**
- (i) Pursuant to 326 IAC 3-5-7(c)(4), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.

Modification No. 31:

Section F.1 and F.2 Updates

IDEM, OAQ is updating permit Section F.1 and F.2 to reflect the emission units subject and to update applicable portions to reflect the most recent rules.

Old Section F.1 and F.2

SECTION F.1 FACILITY OPERATION CONDITIONS

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

~~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 fly ash, 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
- (u) — 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.~~

Revised Sections F.1 and F.2

SECTION F.1 FACILITY OPERATION CONDITIONS – NSPS, Subpart Y

Emission Units:

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

Coal Handling, Milling and Storage Facilities

(121) Coal (crusher) mill #2, identified as EU67

(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

(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]

The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the emission units identified as EU67, EU69 and EU149, except when otherwise specified in 40 CFR 60, Subpart Y.

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);
- 2) 40 CFR 60.251;
- 3) 40 CFR 60.252(a), (a)(1) and (2);
- 4) 40 CFR 60.254(a);
- 5) 40 CFR 60.255(a);
- 6) 40 CFR 60.256(a), (a)(1), (a)(1)(i), (a)(2);
- 7) 40 CFR 60.257(a), (b)(1) through (5); and
- 8) 40 CFR 60.258(b), (b)(2) and (3), (c), and (d).

SECTION F.2 FACILITY OPERATION CONDITIONS – NESHP, Subpart LLL

Emission Units:

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

Raw Material Stockpile Operations

- (4) Raw material (clay overburden) unloading to strippings stockpile, identified as EU78**
- (6) Truck unloading to additive hopper or additive storage piles (various sources of Silica/Alumina/Iron), identified as EU99**
- (9) Truck unloading to clay storage piles, identified as EU102**

Raw Material Sizing Operations

- (12) Raw material unloading to stone surge pile or primary crusher, identified as EU80**
- (15) One (1) covered conveyor belt for transferring stone from primary crusher to screens, identified as EU83**
- (18) Covered conveyor for transferring stone from screens and secondary crusher to tertiary crusher or stone ladder bypass, identified as EU03**
- (20) One (1) conveyor used to bypass tertiary crusher, referred to as the stone ladder (bypass), identified as EU05**
- (21) One (1) covered conveyor for transferring material from stone ladder and tertiary crusher to traveling belt, identified as EU85**
- (22) One (1) traveling belt for transferring material from covered conveyor to North and South stone bins, 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 or truck dump hopper, identified as EU94**
- (32) One (1) truck dump hopper, identified as EU96**
- (33) One (1) limestone conveyor for transferring limestone from the truck dump hopper to the main limestone storage pile, identified as EU97**

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

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

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

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**
- (70) North clinker storage pile, identified as EU122**
- (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**
- (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**
- (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**
- (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**

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 fly ash, 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**
- 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**
- (130a) One (1) pneumatic dry sorbent unloading station with a storage silo, approved for construction in 2013, identified as EU159**
- 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:

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

F.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A – General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the emission units identified as EU03, EU05 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU62, EU66 through 69, EU74, EU78, EU80, EU83, EU85 through EU87, EU89, EU91, EU93, EU94, EU96, EU97, EU99, EU102, EU105 through EU109, EU113 through EU115, EU117 through 127, EU129, EU131, EU132, EU135, EU149 through EU151, and EU153 through 158, except when otherwise specified in 40 CFR 63, Subpart LLL.

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

Pursuant to 40 CFR 63, Subpart LLL, the Permittee shall comply with the following provisions of 40 CFR 63, Subpart LLL, which are incorporated by reference as 326 IAC 20-27:

- (a) All affected units constructed on or before December 2, 2005 are subject to the version of Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002], included as Attachment B to the permit. These units remain subject until the compliance date of the February 12, 2013 rules.

The emission units subject to the rule in effect prior to December 20, 2006 are: EU9 to EU12, EU14 to EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU51, EU53, EU54, EU56, EU59, EU60 through 62, EU68, EU69, EU74, EU105, EU106, EU109, EU114, EU119, EU120, EU123, EU124, EU131, EU132, EU135, EU146, EU149 through 151, and EU153.

These units are subject to the following portions of 40 CFR 63, Subpart LLL published on December 6, 2002 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002] until September 9, 2015, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342(a), (b) Table 1: Lines 1, 2, 4, 5, and 7;
- 4) 40 CFR 63.1343(a), (b), and (d);
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1345;
- 7) 40 CFR 63.1347;
- 8) 40 CFR 63.1348;
- 9) 40 CFR 63.1349(a), (b)(1)(i) to (v), (b)(2), (b)(3)(i) to (vi) (b)(4);
- 10) 40 CFR 63.1349(c), (d), (e) and (f);
- 11) 40 CFR 63.1349(f) Table 1: Lines 1, 2, 3, 5, 6, 7 and 8;
- 12) 40 CFR 63.1350(a), (b), (c)(1) and (3), (d)(1) and (3);
- 13) 40 CFR 63.1350(e), (f), (g), (h) to (m)

- 14) 40 CFR 63.1350(n) Table 1: Lines 1, 2, 3, 4, 6, 7, and 9
- 15) 40 CFR 63.1351;
- 16) 40 CFR 63.1352;
- 17) 40 CFR 63.1353;
- 18) 40 CFR 63.1354;
- 19) 40 CFR 63.1355;
- 20) 40 CFR 63.1356(a)(1), (b);
- 21) 40 CFR 63.1357;
- 22) 40 CFR 63.1358; and
- 23) Table 1 to Subpart LLL.

- (b) All affected sources constructed after December 2, 2005 are subject to the version of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006], included as Attachment C to the permit. These units remain subject until the compliance date of the rule published on February 12, 2013.

The emission units subject to the rule in effect on December 20, 2006 are EU156, EU157 and EU158.

The emission units numbered EU156, EU157 and EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on December 20, 2006 [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 67 FR 72580, December 6, 2002; 71 FR 76517, December 20, 2006] until September 9, 2015, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1348;
- 5) 40 CFR 63.1349(a) and (b)(2);
- 6) 40 CFR 63.1350(a), (j), and (l);
- 7) 40 CFR 63.1350 Table 1: Lines 1, and 9;
- 8) 40 CFR 63.1351(b);
- 9) 40 CFR 63.1353;
- 10) 40 CFR 63.1354(a), (b)(1) to (6), (b)(9)(v);
- 11) 40 CFR 63.1355(a), (b), (c), and (f);
- 12) 40 CFR 63.1357;
- 13) 40 CFR 63.1358; and
- 14) Table 1 to Subpart LLL

- (c) All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The compliance date for the clinker piles in February 12, 2014. EU121 and EU122 are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013], included as Attachment D to the permit, beginning on February 12, 2014.

The emission units numbered EU121 and EU122 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on February 12, 2014, nonapplicable portions of the NESHAP will not be included in the permit:

- 1) 40 CFR 63.1340(a), (b)(9), (c), and (d);
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), and (c)
- 5) 40 CFR 63.1344;
- 6) 40 CFR 63.1347;
- 7) 40 CFR 63.1348(d); and
- 8) 40 CFR 63.1351(e).

- (d) All existing affected units are subject to the rule published on February 12, 2013 on September 9, 2015, except for the clinker piles. The following affected sources are subject to 40 CFR 63, Subpart LLL [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013], included as Attachment D to the permit, beginning on September 9, 2015:

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units numbered EU03, EU05 through EU07, EU09 through EU12, EU14 through EU17, EU19, EU20, EU22 through EU27, EU29 through EU35, EU37 through EU54, EU56, EU57, EU59 through EU62, EU66, EU67, EU74, EU78, EU80, EU83, EU85 through EU87, EU89, EU91, EU93, EU94, EU96, EU97, EU99, EU102, EU105 through 109, EU114, EU119, EU120, EU123 through EU127, EU129, EU131, EU132, EU135, EU151, EU154, and EU156 through EU158 are subject to the following portions of 40 CFR 63, Subpart LLL published on [64 FR 31925, June 14, 1999, as amended at 67 FR 16613, April 5, 2002; 71 FR 76517, December 20, 2006; 75 FR 55051, September 9, 2010; 78 FR 10006, February 12, 2013] beginning on September 9, 2015:

- 1) 40 CFR 63.1340;
- 2) 40 CFR 63.1341;
- 3) 40 CFR 63.1342;
- 4) 40 CFR 63.1343(a), (b)(1);
- 5) 40 CFR 63.1343(b)(1) - Table 1: Lines 1, 2, 3, 7, 8, and 13;
- 6) 40 CFR 63.1343 - Table 2: (Table omitted from final rule);
- 7) 40 CFR 63.1343(c) and (d);
- 8) 40 CFR 63.1344;
- 9) 40 CFR 63.1345;
- 10) 40 CFR 63.1346(a), (b), (f), and (g)
- 11) 40 CFR 63.1347;
- 12) 40 CFR 63.1348(a), (b), (f), and (g);
- 13) 40 CFR 63.1347;
- 14) 40 CFR 63.1348 (To be determined prior to September 9, 2015);
- 15) 40 CFR 63.1349(a), (b)(1) and (b)(1)(i);
- 16) 40 CFR 63.1350(a), (b), (d)(1)(i) to (ii), and (d)(2) to (4);
- 17) 40 CFR 63.1350(f) to (l), (m) to (m)(7) to (m)(11)(vi);
- 18) 40 CFR 63.1350(n) to (n)(2), (n)(4) to (10), (o), (p);
- 19) 40 CFR 63.1351;
- 20) 40 CFR 63.1352;
- 21) 40 CFR 63.1353;
- 22) 40 CFR 63.1354(a) to (b)(3), (b)(6) to (10), (c);
- 23) 40 CFR 63.1355;
- 24) 40 CFR 63.1356;
- 25) 40 CFR 63.1357(a) to (c);
- 26) 40 CFR 63.1358; and
- 27) Table 1 to Subpart LLL.

Modification No. 32:

40 CFR 63, Subpart LLL – Table 2

IDEM, OAQ is adding a new condition to include the applicable requirements of 40 CFR 63, Subpart LLL. This table was not included in the rule printed in the federal register. However, the emission limitations still apply. Revisions are shown below:

F.2.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry [326 IAC 20-27]

Pursuant to 40 CFR 63.1343(d) - emission limits in effect prior to September 9, 2010, The Permittee shall meet the emission limitation shown in Table 2 of 40 CFR 63, Subpart LLL until September 9, 2015. The Permittee shall comply with the following summary of the applicable portions of Table 2 shown below:

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)

ROW	If your source is...	And it commenced construction or reconstruction.....	And is located at...	Then your emission limits and units are ¹ :
1	An existing kiln	On or prior to December 2, 2005	A major source	PM – 0.3 lb/ton feed Opacity – 20% D/F – 0.2 ² ng/dscm (TEQ) THC – 50 ^{3,4} ppmvd
5	An existing clinker cooler	NA	A major source	PM – 0.1 lb/ton feed Opacity – 10%
6	An existing raw material dryer	On or prior to December 2, 2005	A major source	THC – 50 ^{3,4} ppmvd Opacity – 10%

Footnotes Emissions limits in effect prior to September 9, 2010 table:

- ¹ All emission limits expressed as a concentration basis (ppmvd, ng/dscm) are corrected to seven percent oxygen.
- ² If 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).
- ³ Reported as propane on a 30 day block average (964 FR 31932)
- ⁴ Only applies to greenfield kilns or raw material dryers. Note that a new greenfield kiln is a kiln constructed after March 24, 1998 at a site where there are no existing kilns.

Modification No. 33:

Permit Reporting Forms

IDEM, OAQ is updating the format of the reporting forms included at the end of the Part 70 Operating Permit. In addition, a reporting form was added for the sorbent throughput limit contained in Condition D.2.2 and a reporting form was added for the U.S. EPA Consent Decree Limit of 1.7 pounds of SO₂ per ton clinker produced contained in Condition D.3.6. The forms removed and added are shown in their entirety below:

~~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 46204-2254
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

<p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <p><input checked="" type="checkbox"/> 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</p> <p><input checked="" type="checkbox"/> 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.</p>

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: _____

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 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
4							
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**

100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2254
 Phone: 317-233-0178
 Fax: 317-233-6865

**PART 70 OPERATING PERMIT
 Semi-Annual report**

Source Name: _____ ESSROC Cement Corporation
 Source Address: _____ Highway 31, Speed, Indiana 47172
 Part 70 Permit No.: _____ T019-26989-00008
 Facility: _____ Kiln #2 and associated preheater, including the alkali bypass,
 identified as EU027
 USEPA Consent Decree Limit: _____ 2.10 pounds of NOx per ton of Clinker produced, based on a
 _____ 30-day rolling average.

Month: _____ Year: _____

Day	NOx Emissions (lb/ton)	Day	NOx Emissions (lb/ton)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		Total	
16		Average NOx Emissions (Total/30)	

- No deviation occurred in this month.
 Deviation/s occurred in this month.
 — 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

<p>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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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: _____

Signature:

Date: _____

Phone: _____

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 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
Part 70 Permit No.: T019-26989-00008

This form consists of 2 pages

Page 1 of 2

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

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

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

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

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
Type of Pollutants Emitted: TSP, PM-10, SO₂, 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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865**

Part 70 Quarterly Report – Quarry Drilling

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

QUARTER: _____ **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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865

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 No.: T019-26989-00008
Facility: Kiln #1 and Kiln #2
Parameter: Sulfur Dioxide (SO₂) emissions
Limit: 6.0 pounds per million BTU heat input

FACILITY _____ **QUARTER:** _____ **YEAR:** _____

Month	Monthly Average Coal Sulfur Content (%)	Monthly Average Coal Heat Content (MMBtu/lb)	Coal Consumption (tons)	Equivalent Sulfur Dioxide Emissions (lb/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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865

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 No.: T019-26989-00008
Facility: Kiln #1 and Kiln #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:

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

FACILITY _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Sulfur Content (%)		Monthly Average Heat Content (MMBtu/lb)		Month Fuel Consumption		Equivalent SulfurDioxide Emissions (lb/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
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178 and Fax: (317) 233-6865

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 No.: T019-26989-00008
Facility: Kiln #1 and Kiln #2
Parameter: Sulfur Dioxide (SO₂) emissions from fuel oil combustion
Limit: 0.5 pounds per million BTU heat input

FACILITY _____ QUARTER: _____ YEAR: _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (gallons)	Equivalent Sulfur Dioxide Emissions (lb/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
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Quarterly Report

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit 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 _____ **QUARTER:** _____ **YEAR:** _____

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/lb)	Fuel Oil Consumption (gallons)	Equivalent Sulfur Dioxide Emissions (lb/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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Quarterly Report – Sorbent Usage

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172-1305
Part 70 Permit No.: T019-26989-00008
Facility: Sorbent Silo EU159
Parameter: Sorbent Throughput
Limit: 43,800 tons per 12 consecutive month period

QUARTER: _____ **YEAR:** _____

Facility	Month	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Sorbent Silo EU159	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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Operating Permit - Semi-Annual Report

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172
Part 70 Permit No.: T019-26989-00008
Facility: Kiln #2 and associated preheater, including alkali bypass, identified as EU027
U.S. EPA Consent Decree Limit: 2.10 pounds of NOx per ton clinker produced, based on a 30-day rolling average.

Month: _____ Year: _____

Day	NOx Emissions (lb/ton)	Day	NOx Emissions (lb/ton)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		Total	
16		Average NOx Emissions (Total/30)	

No deviation occurred in this month.
 Deviation/s occurred in this month.
 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
 100 North Senate Avenue
 MC 61-53 IGCN 1003
 Indianapolis, Indiana 46204-2251
 Phone: (317) 233-0178 and Fax: (317) 233-6865

Part 70 Operating Permit - Semi-Annual Report

Source Name: ESSROC Cement Corporation
Source Address: 301 Highway 31, Speed, Indiana 47172
Part 70 Permit No.: T019-26989-00008
Facility: Kiln #2 and associated preheater, including alkali bypass, identified as EU027
U.S. EPA Consent Decree Limit: 1.7 pounds of SO₂ per ton clinker produced, based on a 30-day rolling average.

Month: _____ Year: _____

Day	SO ₂ Emissions (lb/ton)	Day	SO ₂ Emissions (lb/ton)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		Total	
16		Average SO ₂ Emissions (Total/30)	

- No deviation occurred in this month.
 Deviation/s occurred in this month.
 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
Part 70 Permit No.: T019-26989-00008

Months: _____ to _____ Year: _____

Page 1 of 2

<p>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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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: _____

Permit Header

The permit header was incorrectly revised under first significant permit modification number 019-31269-00008. IDEM, OAQ is updating the headers as shown below:

ESSROC Cement Corporation First Significant ~~Permit~~ **Source** Modification No.: 019-~~31269~~**33281**-00008 Page ~~1~~ of ~~**~~
Speed, Indiana Modified by: ~~Aida DeGuzman~~**David Matousek** ~~OP No. T019-26989-00008~~
Permit Reviewer: ~~Nisha Sizemore~~**Jenny Acker**

ESSROC Cement Corporation ~~First~~**Second** Significant Permit Modification No.: 019-~~31269~~**33403**-00008 Page ~~1~~ of ~~**~~
Speed, Indiana Modified by: ~~Aida DeGuzman~~**David Matousek** ~~OP No. T019-26989-00008~~
Permit Reviewer: ~~Nisha Sizemore~~**Jenny Acker**

Modification No. 34:

PSD Minor Limits – T019-6016-00008

IDEM, OAQ is correcting original Conditions D.1.1, D.2.1 and D.3.1. The issuance date of T019-6016-00008 is incorrect as are some of the minor limits. Revisions to these conditions are shown below:

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 28, 2012), 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 28, 2012), 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.~~

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1982 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 1.08 lb/hr, after control.**
- (b) PM₁₀ emissions from the baghouse controlling EU155 (CKD sales loadout) shall not exceed 0.65 lb/hr, after control.**
- (c) The number of holes drilled by the quarry drilling process shall not exceed 38,000 per twelve consecutive month period with compliance determined at the end of each month.**
- (d) Particulate matter (PM) emissions shall not exceed 1.3 lb/quarry hole drilled.**

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.~~

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1985 and 1998/1999 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from the baghouse controlling EU74 (warehouse conveyor system for conveying bagged cement) shall not exceed 4.58 lb/hr, after control.**
- (b) Combined particulate matter (PM) emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 4.53 lb/hr, after control.**
- (c) Combined PM₁₀ emissions from the three baghouses controlling EU46 (2D finish mill roll press circuit), exhausting from stacks EPN8, EPN9 and EP93, shall not exceed 2.71 lb/hr, after control.**
- (d) Particulate matter (PM) emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 1.15 lb/hr, after control.**
- (e) PM₁₀ emissions from the baghouse controlling EU154 (CKD sales loadout spout for CKD destined for sale and/or reuse in the process) shall not exceed 0.69 lb/hr, after control.**

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 fly ash 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 fly ash tanks shall not exceed 3.40 pounds per hour.~~

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

Pursuant to Part 70 Operating Permit number T019-6016-00008, issued on June 15, 2004, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1994 and 1996 new source review projects, the following conditions shall apply:

- (a) Particulate matter (PM) emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 5.68 lb/hr, after control.**
- (b) PM₁₀ emissions from baghouse 228, controlling emissions from EU107 (pneumatic truck unloading station), exhausting to stack EP09 shall not exceed 3.40 lb/hr, after control.**
- (c) Particulate matter (PM) emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.27 lb/hr, after control.**
- (d) PM₁₀ emissions from vent filter 255, controlling emissions from EU151 (kiln #2 burner pump system), shall not exceed 0.16 lb/hr, after control.**
- (e) Particulate matter (PM) emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 3.65 lb/hr, after control.**
- (f) PM₁₀ emissions from baghouse 253, controlling emissions from EU149 (kiln #2 pulverized coal silo), exhausting to stack EP101 shall not exceed 2.19 lb/hr, after control.**
- (g) Particulate matter (PM) emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.68 lb/hr, after control.**
- (h) PM₁₀ emissions from vent filter 254, controlling emissions from EU150 (kiln #2 coal weigh system), shall not exceed 0.41 lb/hr, after control.**

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 019-33281-00008 and Significant Permit Modification No. 019-33403-00008. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to David Matousek at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8253 or toll free at 1-800-451-6027 extension 2-8253.
- (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

Technical Support Document - Appendix A Project Emissions Summary

Company Name: ESSROC Cement Corp.
Address: 301 Highway 31, Speed, Indiana 47172-1305
Permit Number: SSM 019-33281-00008 and SPM 019-33403-00008
Reviewer: David Matousek
Date: June 24, 2013

Actual to Projected Actual Analysis

Baseline Period: January 1, 2011 to December 31, 2012 (This period conforms to 326 IAC 2-2-1(e) and 326 IAC 2-3-1(d))

Process/Facility	New Units - Potential to Emit (Limited) (tons/year)									
	PM	PM ₁₀	Direct PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs (CO ₂ e)	Total HAP	Single HAP
Sorbent Storage Silo (EU159)	1.13	1.13	1.13	0.00	0.00	0.00	0.00	0	0.00	0.00
Fugitive Dust from Sorbent Delivery Trucks	3.20	0.61	0.15	0.00	0.00	0.00	0.00	0	0.00	0.00
Total	4.33	1.74	1.28	0.00	0.00	0.00	0.00	0	0.00	0.00

Process/Facility	Existing/Affected Units - Actual Emissions (tons/year)									
	PM	PM ₁₀	Direct PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs (CO ₂ e)	Total HAP	Single HAP
Kiln #2 (EU27) - Baseline Actual Emissions	12.56	12.56	12.56	0.00	0.00	0.00	0.00	0	0.00	0.00
Kiln #2 (EU27) - Projected Actual Emissions	16.22	16.22	16.22	0.00	0.00	0.00	0.00	0	0.00	0.00
ATPA Increase	3.66	3.66	3.66	0.00	0.00	0.00	0.00	0	0.00	0.00

Prevention of Significant Deterioration (PSD) and Emission Offset (EO) Hybrid Test	PSD Hybrid Test (TPY)						PSD/EO (TPY)	EO (TPY)
	PM	PM ₁₀	NOx	VOC	CO	GHGs (CO ₂ e)	SO ₂	Direct PM _{2.5}
PTE of New Units	4.33	1.74	0.00	0.00	0.00	0	0.00	1.28
ATPA Increase Existing/Affected Units	3.66	3.66	0.00	0.00	0.00	0	0.00	3.66
Project Emissions Increase	7.99	5.40	0.00	0.00	0.00	0	0.00	4.94
Significant Levels	25	15	40	40	100	75,000	40	10

Source Modification Determination - 326 IAC 2-7-10.5

Process/Facility	PTE of Project (TPY)									
	PM	PM ₁₀	Direct PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs (CO ₂ e)	Total HAP	Single HAP
Sorbent Storage Silo (EU159)	15.99	10.29	10.29	0.00	0.00	0.00	0.00	0	0.00	0.00
Sorbent Injected into Kiln Exhaust (See Note 3)	43,800	28,198	28,198	0.00	0.00	0.00	0.00	0	0.00	0.00
Kiln #2 Increase in Emissions	3.66	3.66	3.66	0.00	0.00	0.00	0.00	0	0.00	0.00
Fugitive Dust from Sorbent Delivery Trucks	3.20	0.61	0.15	0.00	0.00	0.00	0.00	0	0.00	0.00
Total	43,823	28,213	28,212	0.00	0.00	0.00	0.00	0	0.00	0.00

Notes:

- Baseline emissions were provided by the Permittee and accepted by IDEM, OAQ.
- In accordance with 326 IAC 2-2-2(d)(5) and 326 IAC 2-3-2(c)(5), a "hybrid test" is used for projects involving a combination of new and existing emission units. The "hybrid test" involves using the appropriate applicability test for the type of emission unit listed in 326 IAC 2-2-2(d)(3) to (5) and 326 IAC 2-3-2(c)(3) and (4) and summing the increases.
- IDEM, OAQ has assumed the sorbent is injected to control SO₂ and in the process creates potential PM, PM₁₀ and PM_{2.5} emissions that are controlled downstream by a baghouse.
- This project would have been a major modification under EO because the potential to emit PM_{2.5}, a nonattainment pollutant, for the project exceeded the significant level of 10 TPY. An EO minor limit on the storage silo will ensure the project is minor for EO.

Technical Support Document - Appendix A

Company Name: ESSROC Cement Corp.
 Address: 301 Highway 31, Speed, Indiana 47172-1305
 Permit Number: SSM 019-33281-00008 and SPM 019-33403-00008
 Reviewer: David Matousek
 Date: August 2, 2013

PTE and Controlled Silo Emissions (lb/hr)

	Silo Emissions - Maximum Instantaneous					
	Throughput (ton/hr)	Emission Factor (lb/ton)	PTE (lb/hr)	Control Efficiency (%)	Controlled PTE (lb/hr)	Emission Factor Source
PM	17	0.73	12.41	99.99%	0.0012	SCC #3-05-011-07, % control derived from AP-42, Table 11.12-2, 6/2006
PM ₁₀	17	0.47	7.99	99.99%	0.0008	SCC #3-05-011-07, % control derived from AP-42, Table 11.12-2, 6/2006
PM _{2.5}	17	0.47	7.99	99.99%	0.0008	Assumed the Same as PM ₁₀

326 IAC 6.5 - Particulate Matter (PM) Emission Limitation

Allowable PM Emissions 0.03 grains/DSCF
 Control Device Design Flow 1,000 SCFM

1) Allowable Annual Emissions

PTE PM (TPY) = 1,000 SCFM x 0.03 grains/dSCF x 1 lb/7,000 grains x 60 min/hr x 8,760 hr/yr x 1 ton/2,000 lb

PTE PM (TPY) = 1.13 TPY

PTE and Controlled Silo Emissions (TPY)

Silo Emissions - Potential to Emit							
	Limited Throughput (ton/yr)	Emission Factor (lb/ton)	PTE (TPY)	Control Efficiency (%)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source
PM	43,800	0.73	15.99	99.99%	0.0016	1.13	SCC #3-05-011-07, 326 IAC 6.5 Limit
PM ₁₀	43,800	0.47	10.29	99.99%	0.0010	1.13	SCC #3-05-011-07
PM _{2.5}	43,800	0.47	10.29	99.99%	0.0010	1.13	Assumed the same as PM ₁₀ , 326 IAC 2-3 Limit

Sorbent Injection Emissions - EO Limit

Maximum Injection Rate	5 ton/hr
Annual Hours of Operation	8,760 hr/year
Maximum Annual Usage	43,800 TPY
Ratio of PM ₁₀ & PM _{2.5} / PM	64.38% (Ratio of Emission Factors)
PTE of PM	43,800 TPY
PTE of PM ₁₀ and PM _{2.5}	28,198 TPY

EO Minor Limit

Sorbent Usage (ton per year)	43,800 tons of sorbent used per year
Allowable PM ₁₀ /PM _{2.5} Emissions	1.13 tons of allowable emissions per year

EO Limit (lb/ton) = 1.13 tons emissions/yr x 2,000 lb emissions/ton x 1 yr/43,800 tons of sorbent

EO (Limit) = 0.0516 lb emissions per ton of sorbent

Notes and Methodology

Notes:

- 1) The source intends to inject sorbent slurry of either lime or trona.
- 2) The potential to emit of the sorbent injection system assumes the sorbent is injected to control SO₂ and this injection creates PM, PM₁₀ and PM_{2.5} in the exhaust stream. The potential to emit before controls equals the sorbent injection rate. The limited PTE will equal the emission limits on baghouse 15 and baghouse 16.
- 3) The particulate matter limitation under 326 IAC 6.5 is more restrictive than the 326 IAC 6-3-2.

Methodology:

- 1) PTE (lb/hr) = throughput (ton/hr) x emission factor (lb/ton)
- 2) PTE (TPY) = throughput (ton/hr) x emission factor (lb/ton) x 4.38 ton-hr/lb-yr
- 3) Controlled PTE (TPY) = PTE (TPY) x (1- control efficiency)
- 4) Limited PTE (TPY) is set by permit limits or it is equal to uncontrolled PTE.
- 5) PM_{2.5} Limit (lb/ton) = 6.16 ton PM_{2.5}/yr x 2,000 lb/ton PM_{2.5} x 1 yr/43,800 ton trona = 0.281 lb/ton
- 6) PM₁₀ limit is based on PTE using AP-42 emission factor.

**Technical Support Document - Appendix A
Potential to Emit - Kiln #2 (EU27)**

**Company Name: ESSROC Cement Corp.
Address: 301 Highway 31, Speed, Indiana 47172-1305
Permit Number: SSM 019-33281-00008 and SPM 019-33403-00008
Reviewer: David Matousek
Date: June 24, 2013**

Baseline Actual Emissions - Kiln/Alkali Bypass (EU27)

Baseline Period: January 1, 2011 to December 31, 2012

PM / PM₁₀ / PM_{2.5} Emission Rates		Average Operating Time	Past Actual Emissions (TPY)
Kiln #2 - Mill On	1.2 lb/hr	5,323 hr/yr	3.19
Kiln #2 - Mill Off	7.3 lb/hr	2,074 hr/yr	7.57
Alkali Bypass	0.8 lb/hr	4,501 hr/yr	1.8
Baseline Actual Emissions			12.56

Projected Actual Emissions - Kiln/Alkali Bypass (EU27)

PM / PM₁₀ / PM_{2.5} Emission Rates		Average Operating Time	Projected Actual Emissions (TPY)
Kiln #2 - Mill On	1.2 lb/hr	5,201 hr/yr	3.12
Kiln #2 - Mill Off	7.3 lb/hr	3,054 hr/yr	11.15
Alkali Bypass	0.8 lb/hr	4,865 hr/yr	1.95
Projected Actual Emissions			16.22

Notes:

- 1) The Permittee provided past actual emissions based on the baseline period shown.
- 2) The Permittee estimated future actual emissions based on increased utilization of the kiln. The Permittee does not believe the injection of the sorbent will affect particulate emissions from the control device. This is because the injection rate is 5 tons per hour and the baghouse is normally loaded at almost 300 tons per hour.

Methodology:

- 1) Past Actual Emissions (TPY) = Actual emissions of Kiln #2 with Mill On + Actual emissions of Kiln #2 with Mill Off + Actual Emissions of the Alkali Bypass
- 2) Actual emissions (TPY) = Emission rate (lb/hr) x Operating Time (hr/yr) x 1 ton/2,000 lb

Technical Support Document - Appendix A Potential to Emit - Projected Actual Paved Road Emissions

Company Name: ESSROC Cement Corp.

Address: 301 Highway 31, Speed, Indiana 47172-1305

Permit Number: SSM 019-33281-00008 and SPM 019-33403-00008

Reviewer: David Matousek

Date: July 09, 2013

Average Vehicle Weight Calculation

Vehicle Type	Trucks/Day	Average Weight (tons)	Total Trips per Year	Miles per Trip	Vehicle Miles Traveled (miles per year)	Traffic Component (%)	Component Weight (tons)
Loaded Truck	10	32	3,793	0.3	1,138	50.00%	16.00
Empty Truck	10	20	3,793	0.3	1,138	50.00%	10.00
Total VMT					2,276		
Average Vehicle Weight (tons) - W							26.00

Site Constants

Value Name	Symbol	Value	Units	Source
Emission Factor	E	---	g/VMT	Calculated
Particle Size Multiplier	k for PM	5.24	g/VMT	AP-42 Table 13.2.1-1, January 2011
Particle Size Multiplier	k for PM10	1.00	g/VMT	AP-42 Table 13.2.1-1, January 2011
Particle Size Multiplier	k for PM2.5	0.25	g/VMT	AP-42 Table 13.2.1-1, January 2011
Silt Loading	sL	12	g/m ²	AP-42 Table 13.2.1-3, January 2011
Days >0.01" of rain	P	125	days	AP-42, Figure 13.2.1-2, January 2011
Mean Vehicle Weight	W	26.00	tons	Calculated above

Emission Factor Calculations

$E = [k * (sL)^{0.91} * (W)^{1.02}] * [1 - P/(4 * N)]$				AP-42, Chapter 13.2.1-5, January 2011, Eq. 2
E for PM =	1,275.81	g/VMT	2.8127	lb/VMT
E for PM ₁₀ =	243.48	g/VMT	0.5368	lb/VMT
E for PM _{2.5} =	60.87	g/VMT	0.1342	lb/VMT

Potential to Emit

PM Emissions (TPY) = [Annual Average E for PM (lb/VMT) * Total VMT/yr * 1 ton / 2,000 lb]	3.20	TPY
PM ₁₀ Emissions (TPY) = [Annual Average E for PM ₁₀ (lb/VMT) * Total VMT/yr * 1 ton / 2,000 lb]	0.61	TPY
PM _{2.5} Emissions (TPY) = [Annual Average E for PM _{2.5} (lb/VMT) * Total VMT/yr * 1 ton / 2,000 lb]	0.15	TPY

Technical Support Document - Appendix A

Company Name: ESSROC Cement Corp.
 Address: 301 Highway 31, Speed, Indiana 47172-1305
 Permit Number: SSM 019-33281-00008 and SPM 019-33403-00008
 Reviewer: David Matousek
 Date: June 24, 2013

1982 Project		
Facility	Limited PM Emissions (TPY and lb/hole)	
EU01 (Quarry Drilling) - 38,000 holes per year	24.7	1.30
Total	24.7	1.30
PSD Significant Levels	25	

Limited Emissions (lb/hole) = Emissions (ton/yr) x 2,000 lb/ton x 1 yr/38,000 holes

1985 Project		
Facility	Limited PM Emissions (TPY and lb/hr)	
EU73 (Vacuum System) / No longer onsite	4.8618	1.11
EU74 (Warehouse Convyor)	20.06	4.58
Total	24.92	5.69
PSD Significant Levels	25	

1994 Project				
Facility	Limited PM Emissions (TPY and lb/hr)		Limited PM ₁₀ Emissions (TPY and lb/hr)	
Baghouse 228 - Pneumatic Truck Unloading EU107, Stack EP09	24.9	5.68	14.9	3.40
Total	24.9	5.68	14.9	3.40
PSD Significant Levels	25		15	

Technical Support Document - Appendix A
 NSR Review (Continued)

1996 Project				
Facility	Limited PM Emissions (TPY and lb/hr)		Limited PM ₁₀ Emissions (TPY and lb/hr)	
	EU151 (kiln #2 coal handling)	1.18	0.27	0.70
EU149 (kiln #2 coal silo)	15.99	3.65	9.59	2.19
EU155 (kiln #1 CKD sales loadout)	4.73	1.08	2.85	0.65
EU150 (kiln #2 coal weigh system)	2.98	0.68	1.80	0.41
Total	24.88	5.68	14.94	3.41
PSD Significant Levels	25		15	

1998/1999 Project				
Facility	Limited PM Emissions (TPY and lb/hr)		Limited PM ₁₀ Emissions (TPY and lb/hr)	
	EU154 (CKD sales loadout spout)	5.04	1.15	3.02
EU46 (2D finish mill roll press circuit)	19.84	4.53	11.87	2.71
Total	24.88	5.68	14.89	3.40
PSD Significant Levels	25		15	



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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: David Hitt
Essroc Cement Corporation
301 Hwy 31
Speed, IN 47172-1305

DATE: October 24, 2013

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

SUBJECT: Final Decision
Title V - Significant Source Modification
019 - 33281 - 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:
Mike NcHugh, Plant Mgr
Kathy Strubberg Schreiber Yonley and Assc.
Phillip & Kathy Combs
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 6/13/2013



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Governor

Thomas W. Easterly
Commissioner

October 24, 2013

TO: Sellersburg Public Library

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

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

Applicant Name: Essroc Cement Corporation
Permit Number: 019 - 33281 - 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 6/13/2013



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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: October 24, 2013

RE: Essroc Cement Corporation / 019 - 33281 - 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 6/13/2013

Mail Code 61-53

IDEM Staff	LPOGOST 10/24/2013 ESSROC Cement Corp 019 - 33281 - 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		David Hitt ESSROC Cement Corp 301 Hwy 31 Speed IN 47172-1305 (Source CAATS) Via confirmed delivery										
2		Mike NcHugh 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. Tim Lynch 315 Martin St Borden IN 47106 (Affected Party)										
5		Ms. Rhonda England 17213 Persimmon Run Rd Borden IN 47106-8604 (Affected Party)										
6		Rita Goedelher or Sadie Sansone 9402 New Market Road Charlestown IN 47111 (Affected Party)										
7		The Abell Family 216 Bates Drive Charlestown IN 47111 (Affected Party)										
8		Ms. Lindsey Bertram 319 Locust Drive Charlestown IN 47111 (Affected Party)										
9		Ms. Rhonda Cole 175 Morningside Drive Charlestown IN 47111 (Affected Party)										
10		Ms. Kristin Coy 1918 Vienna Road Charlestown IN 47111 (Affected Party)										
11		Mr. John Croucher Indiana Army Ammunition Place HWY 62 Charlestown IN 47111 (Affected Party)										
12		Mr. Michael Crum 5506 Salem Noble Rd Charlestown IN 47111 (Affected Party)										
13		Mr. Boyd Thompson 2907 Highway 160 Charlestown IN 47111 (Affected Party)										
14		Mr. Aaron Daniels 13411 Highway 62 Charlestown IN 47111 (Affected Party)										
15		Mr. Glen R. Sherlin Jr. 177 Morningside Drive Charlestown IN 47111 (Affected Party)										

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Mail Code 61-53

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											Remarks
1		Ira W. 6801 Old Bethany Road Charlestown IN 47111 (Affected Party)									
2		Ms. Meredith Sims 5410 Greenleaf Frive Charlestown IN 47111 (Affected Party)									
3		James & Janet Goodwin 6906 Salem-noble Rd. Charlestown IN 47111 (Affected Party)									
4		Mr. Michael Grayson 6940 Ridge Point Way Charlestown IN 47111 (Affected Party)									
5		Ms. Andrea Edens 3604 Crescent Road Charlestown IN 47111 (Affected Party)									
6		Mr. Joshua Emily 8507 Eagletrail Charlestown IN 47111 (Affected Party)									
7		Chris & Cassie Ziem 2103 Fulton Drive Charlestown IN 47111 (Affected Party)									
8		Louis & Joyce Weber 7812 Salem Noble Road Charlestown IN 47111 (Affected Party)									
9		Ms. Sarah Hall 1513 Seatick Road Charlestown IN 47111 (Affected Party)									
10		Robert & Tana Harris 7706 Stone Creek Court Charlestown IN 47111 (Affected Party)									
11		Mr. Fred Ray 7804 Lost Creek Trail Charlestown IN 47111 (Affected Party)									
12		Ms. Lisa Nepier 206 west Drive Charlestown IN 47111 (Affected Party)									
13		Ms. Kris Knight 3324 Jack Teeple Road Charlestown IN 47111 (Affected Party)									
14		Mr. Christopher Howard 191 Highway 160 Charlestown IN 47111 (Affected Party)									
15		Mr. Andrew Merriman 201 Church Street Charlestown IN 47111 (Affected Party)									

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1		James A Indiana State Senator 774 Level Charlestown IN 47111 (Legislator)										
2		Mr. Clifford H. Schafer 9002 Stonemour way Charlestown IN 47111-9697 (Affected Party)										
3		Ms. Betty Hislip 602 Dartmouth Drive, Apt 8 Clarksville IN 47129 (Affected Party)										
4		Mr. Clifford B Ernst, Jr. 10577 North Skyline Drive Floyds Knobs IN 47119 (Affected Party)										
5		Ms. Lois Ham 4204 Fawn Ct. Floyds Knobs IN 47119-9650 (Affected Party)										
6		Julia Daughy 613 Lincoln Speed IN 47 (Affected Party)										
7		Mrs. Sandy Banet 514 Haddox Rd Henryville IN 47126 (Affected Party)										
8		Mr. Ralph Guthrie Highway 160 East Henryville IN 47126 (Affected Party)										
9		Ms. Bernice Prall 16715 Beyl Road Henryville IN 47126 (Affected Party)										
10		J. C. McReynolds 3009 Speith Road Henryville IN 47126 (Affected Party)										
11		Ms. Thelma Guernsey 623 Lincoln Blvd. Sellersburg IN 47172 (Affected Party)										
12		Mr. James Hale 24 Maple Street Sellersburg IN 47172 (Affected Party)										
13		Eric & Kathy Cunningham 5403 Shurgate Rd Jeffersonville IN 47130 (Affected Party)										
14		Ms. Rachel Cunnisher 5403 shurgate Road Jeffersonville IN 47130 (Affected Party)										
15		Jeffersonville City Council and Mayors Office 500 Quarter Master Jeffersonville IN 47130 (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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											Remarks
1		Bonnie J 1212 Birschwood Drive Jeffersonville IN 47130 (Affected Party)									
2		Mr. Edward Meyer 2608 Bennet Ave. Jeffersonville IN 47130 (Affected Party)									
3		Mr. Chris Myers 3208 Marion Court Louisville KY 40206 (Affected Party)									
4		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)									
5		Ms. Renee Butterworth Concerned Citizen Coalition 13500 Horncastle Way Louisville KY 40272-1326 (Affected Party)									
6		Ms. Maryann Carney 12001 Treloar Avenue Memphis IN 47143 (Affected Party)									
7		Mr. Lonnie Cooper 10312 Sticker Road Memphis IN 47143 (Affected Party)									
8		Mark & K. C. Cooper 10102 Sticker RD Memphis IN 47143 (Affected Party)									
9		Mr. BJ Steele 12512 Bennettsville Road Memphis IN 47143 (Affected Party)									
10		Mr. John Hamm, Sr 11714 Charlestown-Memphis Rd Memphis IN 47143 (Affected Party)									
11		Ms. Sharon Park 11011 Stricker Road Memphis IN 47143 (Affected Party)									
12		Mr. John Beyl 13251 Morning Mist Trail Memphis IN 47143 (Affected Party)									
13		Mr. Scott Ellis Cadence Environmental Inc. Cadence Park Plaza Michigan City IN 46360 (Affected Party)									
14		Mr. Michael Wildt 1020 Falcon Ct. New Albany IN 47150-5463 (Affected Party)									
15		Ms. Connie Dietrich 2515 Leon Prall Road Otisco IN 47163 (Affected Party)									

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Mail Code 61-53

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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		

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		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 586 Eastern Blvd Clarksville IN 47129 (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		Sellersburg Town Council 316 Utica Street Sellersburg IN 47172 (Local Official)										
14		Mr. Larry E. Thomas Silver Creek Juniot High Faculty 495 North Avenue Sellersburg IN 47172 (Affected Party)										
15		Mr. Ken Rush Sellersburg Stone Company, Inc. 1019 East Utica Street Sellersburg IN 47172 (Affected Party)										

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1		Junita & Alfred 316 Kahl CT Sellersburg IN 47172 (Affected Party)										
2		Carol & Charles Deaton 403 Allhands Avenue Sellersburg IN 47172 (Affected Party)										
3		Mr. William Wise 522 Linnwood Sellersburg IN 47172 (Affected Party)										
4		Ms. Lisa Goodwin 624 Allen RD Sellersburg IN 47172 (Affected Party)										
5		Don & Carol Dooley 24 LaSalle St Sellersburg IN 47172 (Affected Party)										
6		Mr. Philip D Downey Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
7		Ms. Linda Everage 4024 Perry Crossing Rd Sellersburg IN 47172 (Affected Party)										
8		Mr. Tony Grider 151 S Fern St. Sellersburg IN 47172 (Affected Party)										
9		Edward & Denna Wilder 634 Georgian Avenue Sellersburg IN 47172 (Affected Party)										
10		Jerry & Deborah S. Wilkerson 4813 Greenleaf Road Sellersburg IN 47172 (Affected Party)										
11		The Smith Residence 335 Popp Avenue Sellersburg IN 47172 (Affected Party)										
12		James & Bernadine Hall 614 Georgian Avenue Sellersburg IN 47172 (Affected Party)										
13		Mr. Rudolph Hamblin 548 Eastside Avenue Sellersburg IN 47172 (Affected Party)										
14		Mr. James H Hamilton 1710 Mayfair Drive Sellersburg IN 47172 (Affected Party)										
15		Bob & Sara Hauselman Restoration Christian Church & School 11515 Highway 31 Sellersburg IN 47172 (Affected Party)										

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1		Phyllis 606 Lane Avenue Sellersburg IN 47172 (Affected Party)										
2		Mr. Maynard A. Perkins 9141 Virginia Heights Sellersburg IN 47172 (Affected Party)										
3		Belva J. Ollis 611 Whitner Court Sellersburg IN 47172 (Affected Party)										
4		Ms. Nancy Kerstiens 712 Easet Delaware Court Sellersburg IN 47172 (Affected Party)										
5		Mr. Gary Koerber 2413 Allentown Rd. Sellersburg IN 47172 (Affected Party)										
6		Ms. Amy McIntyre 647 Mulberry Street Sellersburg IN 47172 (Affected Party)										
7		Ms. Tammy McKinley 8012 SR 60 Sellersburg IN 47172 (Affected Party)										
8		Mr. Kenneth R Miller 2715 Ellentown Road Sellersburg IN 47172 (Affected Party)										
9		W. T. & Janet Kranz 4119 Greenleaf Rd. Sellersburg IN 47172 (Affected Party)										
10		Tony & Judith Lewis 4507 Greenleaf RD Sellersburg IN 47172 (Affected Party)										
11		Gary & Linda Lewis 212 South Fern Street Sellersburg IN 47172 (Affected Party)										
12		Dr. David & Mary Ann Losey 627 Allen RD Sellersburg IN 47172 (Affected Party)										
13		Mr. Bruce A. Mayfield Silver Creek Junior High Faculty 495 North Indiana Avenue Sellersburg IN 47172 (Affected Party)										
14		Mr. Mark Kayrouz 615 Lincoln Blvd. Sellersburg IN 47172 (Affected Party)										
15		Ms. Yvonne Willhite 8898 East 100 South Seymour IN 47274 (Affected Party)										

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1		Jennifer 7501 East 200 North Seymour IN 47274 (Affected Party)										
2		Ms. Marlyn Coomes 144 Clark Street Speed IN 47172 (Affected Party)										
3		Ms. Shelley Sarles 222 Virginia Street Speed IN 47172 (Affected Party)										
4		Ms. Chrystal Dutz 110 Clark Street Speed IN 47172 (Affected Party)										
5		Mr. Alan K. Waig 162 South Indiana Avenue Speed IN 47172 (Affected Party)										
6		Mr. James S Haehl 24 Maple Street Speed IN 47172 (Affected Party)										
7		Ms. Barbara Keehn 21 Maple Speed IN 47172-1314 (Affected Party)										
8		Mrs. Terry Swan-Corya 5119 Bud Prather Road Sellersburg IN 47172 (Affected Party)										
9		Mr. Rodney Donohne 612 Lincoln Blvd Sellersburg IN 47172 (Affected Party)										
10		Ms. Susan Riley 618 Lincoln Blvd Sellersburg IN 47172 (Affected Party)										
11		Robert G. & Beverly Jackson 601 Lincoln Blvd. Speed IN 47172-1312 (Affected Party)										
12		Sellersburg Public Library 430 N Indiana Ave Sellersburg IN 47172 (Library)										
13		Mr. Jim Henderson 27 Maple Street Sellersburg IN 47172 (Affected Party)										
14		The Honorable Paul Robertson 8990 Bird Trail NW Depauw IN 47172 (Legislator)										
15		Clark County Board of Commissioners 501 E. Court Avenue Jeffersonville IN 47130 (Local Official)										

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1		John 5402 Stone Creek Drive Charlestown IN 47111 (Affected Party)										
2		Kathy & Greg Gapsis 8175 Old Vincesses Rd Greenville IN 47124 (Affected Party)										
3		Ms. Sarah Whitlow 5164 St. Johns Road Greenville IN 47124 (Affected Party)										
4		Ms. Julie Reising 5221 Clover Ridge Drive Greenville IN 47124-9528 (Affected Party)										
5		Clark County Health Department 1320 Duncan Avenue Jeffersonville IN 47130-3723 (Health Department)										
6		Kathy Strubberg Schreiber Yonley and Assc. 16252 Westwoods Business Park Drive Ellisville MO 63021 (Consultant)										
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