



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: April 04, 2006
RE: ESSROC Cement Corporation / 017-22539-00005
FROM: Nisha Sizemore
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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) 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.

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

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

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

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



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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
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Mr. Brian K. Graf
ESSROC Cement Corporation
3084 West County Road 225
Logansport, IN 46947

April 04, 2006

Re: **017-22539-00005**
Significant Permit Modification to:
Part 70 Operating Permit No.: **T 017-6033-00005**

Dear Mr. Graf:

ESSROC Cement Corporation was issued Part 70 Operating Permit T017-6033-00005 on December 29, 2003 for a Portland cement manufacturing plant. A letter requesting changes to this permit was received on November 30, 2005. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit (T017-22539-00005) is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition a cement kiln dust to finish mill recycling project and revising the compliance determination and monitoring requirements.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire Part 70 Operating Permit as modified.

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 Jenny Acker, at (800) 451-6027, and ask for Jenny Acker or extension 2-8253, or dial (317) 232-8253.

Sincerely,

Original signed by
Paul Dubenetzky
Assistant Commissioner
Office of Air Quality

Attachments

JLA

cc: File - Cass County
Cass County Health Department
Air Compliance Section Inspector – Dave Rice
Compliance Branch
Administrative and Development Section
Billing, Licensing and Training



Mitchell E. Daniels, Jr.
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Thomas W. Easterly
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100 North Senate Avenue
Indianapolis, Indiana 46204-2251
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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**ESSROC Cement Corporation
State Road 25 South, 3084 West County Road 225 South
Logansport, Indiana 46947**

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

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

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

| | |
|--|--|
| Operation Permit No.: T017-6033-00005 | |
| Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality | Issuance Date: December 29, 2003 Expiration Date: December 29, 2008 |

| | |
|--|---|
| Significant Permit Modification No.: 017-22539-00005 | |
| Issued by: Original signed by Nisha Sizemore for Paul Debenetzky, Assistant Commissioner Office of Air Quality | Issuance Date: April 06, 2006 Expiration Date: December 29, 2008 |

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2] [326 IAC 2-7-5(15)]

B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]
[326 IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.13 Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5]
- B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- 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]
- B.16 Permit Renewal [326 IAC 2-7-4]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12(b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-30-3-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]
- B.24 Creditable Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-16]

C SOURCE OPERATION CONDITIONS

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

- C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than
One Hundred (100) pounds per hour [326 IAC 6-3-2]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

C.9 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- C.20 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]
- C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
- C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
- C.23 NESHAP Notification Requirements [40 CFR 63]

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

- D.1.1 PSD Minor Limits [326 IAC 2-2]
- D.1.2 Particulate Emissions [326 IAC 6-3-2]
- D.1.3 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.1.5 Particulate Control [326 IAC 2-7-6(6)]

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

- D.1.6 Visible Emissions Notations
- D.1.7 Parametric Monitoring
- D.1.8 Broken or Failed Bag Detection

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

D.1.9 Record Keeping Requirements

D.2 FACILITY OPERATION CONDITIONS - CKD Operations, Clay processing operations, Crane storage facilities, Raw Mill facilities, Unloading station facilities, Fossil fuel facilities, Clinker handling facilities, Finish mill facilities, Silo storage facilities and transfer operations, Finish product loadout, Finish product masonry packing and portland packing

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

- D.2.1 PSD Minor Limits [326 IAC 2-2]
- D.2.2 Particulate Emissions [326 IAC 6-3-2]
- D.2.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.2.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]
- D.2.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]
- D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.2.8 Particulate Control [326 IAC 2-7-6(6)]
- D.2.9 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

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

- D.2.10 Visible Emissions Notations
- D.2.11 Parametric Monitoring
- D.2.12 Broken or Failed Bag Detection

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

- D.2.13 Record Keeping Requirements
- D.2.14 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - Kilns

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

- D.3.1 Particulate Emissions [326 IAC 6-3-2]
- D.3.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1]
- D.3.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.3.4 NESHAP Emission Limitations [40 CFR 63, Subpart EEE]
- D.3.5 Alternate Emission Limitations [40 CFR 63, Subpart EEE]
- D.3.6 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]
- D.3.7 NESHAP for Benzene Waste Operations [40 CFR 61, Subpart FF]
- D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.9 Testing Requirements [40 CFR 63, Subpart EEE] [326 IAC 2-7-6(1),(6)] [326 IAC 2-1-3(i)(8)] [326 IAC 2-1.1-11]
- D.3.10 Particulate Control [326 IAC 2-7-6(6)]
- D.3.11 Sulfur Dioxide Emissions and Sulfur Content
- D.3.12 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 63, Subpart EEE] [326 IAC 2-7-6(1),(6)]
- D.3.13 NESHAP Monitoring Requirements [40 CFR 63, Subpart EEE]

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

- D.3.14 ESP Parametric Monitoring and ESP Inspections

D.3.15 Visible Emissions Notations

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

D.3.16 Record Keeping Requirements

D.3.17 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS - Clinker Coolers

Emission Limitations and IAC 2-7-5(1)

D.4.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

D.4.2 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

D.4.3 Determination of Nonapplicability [40 CFR 60, Subparts A and F]

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.4.5 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

D.4.6 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 60, Subpart F]

D.4.7 Particulate Control [326 IAC 2-7-6(6)]

D.4.8 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

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

D.4.9 Parametric Monitoring

D.4.10 Visible Emission Notations

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

D.4.11 Record Keeping Requirements

D.4.12 Reporting Requirements

D.5 FACILITY OPERATION CONDITIONS - Degreasing Operations

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

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

D.5.3 Determination of Nonapplicability [40 CFR 60.460 Subpart T] [40 CFR 60 Subparts A and F] [40 CFR 63 Subparts A and LLL]

D.6 FACILITY OPERATION CONDITIONS - Hazardous Waste Storage Facilities

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

D.6.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR 63, Subpart A]

D.6.2 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR 61, Subpart A]

D.6.3 Off-site Waste and Recovery Operations NESHAP [326 IAC 20-23-1] [40 CFR 63, Subpart DD]

D.6.4 NESHAP (Fugitive Emission Sources) [326 IAC 14-8-1] [40 CFR 61, Subpart V]

D.6.5 Monitoring Procedures for Equipment Leaks [326 IAC 2-7-6(1)] [40 CFR 61, Subpart V] [40 CFR 63, Subpart DD]

D.6.6 NESHAP for Benzene Waste Operations [40 CFR 61, Subpart FF]

D.6.7 Standards: Closed-vent Systems and Activated Carbon Canister System [40 CFR 61, Subpart FF] [40 CFR 61.349]

D.6.8 Monitoring Procedures for Tanks [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

D.6.9 Monitoring Procedures for Containers [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

D.6.10 Monitoring Procedures for Activated Carbon Canister System and Closed-Vent System [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

D.6.11 Startup, Shutdown, and Malfunction Plan [40 CFR 63.6(e)(3) General Provisions]

Compliance Determination Requirements

D.6.12 Leak Detection Testing Requirements [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

D.6.13 Activated Carbon Canister System Compliance Determination Requirements [326 IAC 2-7-6(1)]
[40 CFR 61, Subpart FF]

Record Keeping and Reporting Requirements

D.6.14 General Record Keeping Requirements [40 CFR 63, Subpart A] [40 CFR 63, Subpart DD]
[40 CFR 61, Subpart FF]

D.6.15 Record Keeping Requirements for Equipment Leaks [40 CFR 63, Subpart DD]
[40 CFR 61, Subpart V]

D.6.16 Record Keeping Requirements for Tanks and Containers [40 CFR 61, Subpart FF]

D.6.17 Record Keeping Requirements for Activated Carbon Canister System and Closed-Vent System [40 CFR 61, Subpart FF]

D.6.18 Reporting Requirements [40 CFR 63, Subpart A] [40 CFR 63, Subpart DD]
[40 CFR 61, Subpart V]

D.6.19 Reporting Requirements [40 CFR 61, Subpart FF]

Certification

Emergency Occurrence Report

Quarterly Reports

Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 and the 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(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

| | |
|------------------------------|---|
| Responsible Official: | Plant Manager |
| Source Address: | State Road 25 South, 3084 West County Road 225 South, Logansport, Indiana 46947 |
| Mailing Address: | 3084 West County Road 225 South, Logansport, Indiana 46947 |
| General Source Phone Number: | 219 753-5121 |
| SIC Code: | 3241 |
| County Location: | Cass |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Part 70 Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 listed source categories |

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

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

Quarry Activities

- (1) Drilling and blasting, identified as EU101 and EU102 respectively, commenced operation in 1961, with associated fugitive particulate matter (PM) emissions.

Raw Material / Clinker Stockpile Operations

- (2) One (1) limestone stockpile, identified as EU103, created in 1961.
- (3) Two (2) reclaimed clay stockpiles, identified as EU104 and EU105, created in 1961.
- (4) Two (2) wet flyash stockpiles, identified as EU106 and EU107, created in 1967.
- (5) Carhoe Missouri clay unloading, identified as EU108, created in 1962.
- (6) Truck to quarry loading, identified as EU109, commenced operation in 1961.
- (7) One (1) Mo. clay stockpile, identified as EU110, created in 1962.
- (8) One (1) alternate materials stockpile, identified as EU111, created in 1967.
- (9) One (1) overburden clay stockpile, identified as EU128, created in 1962.

- (10) One (1) iron stockpile, identified as EU301, created in 1967.
- (11) Iron unloading, identified as EU302, commenced operation in 1967.
- (12) One (1) gypsum stockpile, identified as EU303, created in 1962.
- (13) Gypsum unloading, identified as EU304, created in 1962.
- (14) One (1) coal/coke stockpile, identified as EU305, created in 1962.
- (15) Coal/coke unloading, identified as EU306, commenced operation in 1962.
- (16) One (1) coal/coke crane storage stockpile, located outside, identified as EU312, created in 1962.
- (17) Coal/coke unloading, identified as EU313, commenced operation in 1962.
- (18) Outside clinker storage stockpiles, identified as EU512, created in 1962.
- (19) Special clinker stockpile, identified as EU513, created in 1962.
- (20) Clinker loading, identified as EU514, commenced operation in 1962.
- (21) Special clinker stockpile (crushed), identified as EU515, created in 1962.

Raw Material Sizing Operations

- (22) Raw material loading, identified as EU112, commenced operation in 1962.
- (23) Quarry haul road, identified as EU113, created in 1961.
- (24) Raw material unloading, identified as EU114, commenced operation in 1962.
- (25) One (1) apron feeder transfer to primary crusher, identified as EU115, constructed in 1961, with a nominal throughput of 550 tons per hour.
- (26) One (1) primary crusher, identified as EU116, constructed in 1961, with a nominal capacity of 550 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse CE101, and exhausting to one (1) stack, identified as EP101.
- (27) One (1) clean-up screw, identified as EU117, constructed in 1961, with a nominal capacity of 15 tons per hour.
- (28) One (1) impact apron feeder, identified as EU118, constructed in 1961, with a nominal capacity of 550 tons per hour, with emissions controlled by a baghouse, identified as baghouse CE101, and exhausting to one (1) stack, identified as EP101.
- (29) Belt 1 covered conveyor, identified as EU119, constructed in 1962, with a nominal capacity of 550 tons per hour, with emissions controlled by two baghouses, identified as baghouse CE101 and baghouse CE102, and exhausting to two (2) stacks, identified as EP101 and EP102.

- (30) Screen transfers, identified as EU120, constructed in 1962, with a nominal capacity of 550 tons per hour.
- (31) Belt 2 covered conveyor, identified as EU121, constructed in 1962, with a nominal capacity of 300 tons per hour.
- (32) One (1) secondary crusher, identified as EU122, constructed in 1969, with a nominal capacity of 300 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse CE102, and exhausting to one (1) stack, identified as EP102
- (33) Belt 3 covered conveyor, identified as EU201, constructed in 1962, with a nominal capacity of 550 tons per hour.

Kiln #1 and kiln #2 Recycled CKD Operations

- (34) #1 recycled dust elevator, identified as EU408, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 106 and CE402, and exhausting to one (1) stack identified as EP402.
- (35) One (1) recycled dust holding tank, identified as EU409, and constructed in 1965.
- (36) One (1) feeder screw and F-K pump, identified as EU410, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 106 and CE402, and exhausting to one (1) stack identified as EP402.
- (37) #1 recycled dust scoop system/insufflation system, identified as EU411, with emissions exhausting directly to the kilns. The #1 recycled dust scoop was constructed in 1995. The insufflation system was constructed in 1965.

Kiln #1 and kiln #2 Waste CKD Operations

- (38) five (5) discharge hopper screws, identified as EU402, constructed in 1965.
- (39) one (1) covered 16" cross screw, identified as EU403, constructed in 1965.
- (40) One (1) #1 waste dust elevator, identified as EU404, constructed in 1965.
- (41) One (1) 9" cross screw, identified as EU405, constructed in 1965.

Kiln #2 Recycled CKD Operations

- (42) #2 recycled dust elevator, identified as EU417, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 106 and CE402, and exhausting to one (1) stack identified as EP402.
- (43) One (1) recycled dust holding tank, identified as EU418, constructed in 1965.
- (44) One (1) feeder screw and F-K pump, identified as EU419, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 106 and CE402, and exhausting to one (1) stack identified as EP402.

- (45) #2 recycled dust scoop system/insufflation system, identified as EU420, with emissions exhausting directly to the kilns. The #2 recycled dust scoop system was constructed in 1995. The insufflation system was constructed in 1965.

Kiln #2 Waste CKD Operations

- (46) five (5) discharge hopper screws, identified as EU414, constructed in 1965.
- (47) 16" covered cross screws, identified as EU415, constructed in 1965.
- (48) #2 waste dust elevator, identified as EU416, constructed in 1965.

CKD –Silo Storage Facilities

- (49) One (1) silo, Silo 15, identified as EU905, constructed in 1965, with particulate emissions controlled by one (1) baghouse, identified as baghouse 144 and CE905, and exhausting to one (1) stack, identified as EP905

Waste CKD Disposal Operations

- (50) Truck unloading, identified as EU407, commenced operation in 1962.
- (51) One (1) cement kiln dust haul road system, identified as EU422, constructed in 1962.
- (52) One (1) cement kiln dust pile, identified as EU423, commenced operation in 1962.

Clay Processing Operations

- (53) Clay unloading to hopper, identified as EU123, commenced operation in 1962, with a nominal capacity of 30 tons per hour.
- (54) One (1) wobbler feeder for transferring clay to the log washer system, identified as EU124, constructed in 1962, with a nominal capacity of 30 tons per hour.
- (55) One (1) log washer system, identified as EU125, constructed in 1962, with a nominal capacity of 30 tons per hour.
- (56) One (1) waste gravel pile, identified as EU126, created in 1962.
- (57) Loading waste gravel into trucks, identified as EU127, commenced operation in 1962.

Crane Storage Facilities

- (58) Three (3) limestone storage bins, identified as EU202, constructed in 1962.
- (59) One (1) Missouri clay storage bin, identified as EU203, constructed in 1962.
- (60) One (1) iron storage bin, identified as EU204, constructed in 1962.
- (61) West flyash truck unloading utilizing pneumatic conveying, identified as EU210, including

tank 9, commenced operation in 1962, with a nominal storage capacity of 100 tons, tank 10 with a nominal storage capacity of 100 tons, tank 11 with a nominal storage capacity of 125 tons, and tank 12 with a nominal capacity of 125 tons, with emissions controlled by a baghouse, identified as baghouse 138 and CE202, and exhausting to one (1) stack identified as EP202.

- (62) One (1) inside west flyash holding tank, identified as EU211, with a nominal storage capacity of 130 tons, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 104 and CE203, and exhausting to one (1) stack identified as EP203.
- (63) East flyash truck unloading utilizing pneumatic conveying, identified as EU213, commenced operation in 1962, with emissions controlled by a baghouse, identified as baghouse 103 and CE204, and exhausting to one (1) stack identified as EP204.
- (64) One (1) east flyash storage bin, identified as EU214, constructed in 1962.
- (65) One (1) spare storage bin, identified as EU314, constructed in 1962.
- (66) One (1) coal/coke storage bin, identified as EU315, constructed in 1962.
- (67) Two (2) gypsum storage bins, identified as EU316, constructed in 1962.
- (68) Clinker bin 1 finish mill #1, identified as EU505, constructed in 1962.
- (69) Stone/clinker bin 2 finish mill #1, identified as EU506, constructed in 1962.
- (70) Clinker bin 3 finish mill #1, identified as EU507, constructed in 1962.
- (71) Crane unloading, identified as EU510, commenced operation in 1962.
- (72) Clinker bin 1 #2 finish mill, identified as EU520, constructed in 1962.
- (73) Clinker bin 2 #2 finish mill, identified as EU521, constructed in 1962.
- (74) Bin 1 clinker spill pile, identified as EU522, constructed in 1962.

Raw Mill Facilities

- (75) Three belt feeders, identified as EU205, constructed in 1962, with a nominal capacity of 45 tons per hour.
- (76) One (1) Missouri clay belt feeder, identified as EU206, constructed in 1962, with a nominal capacity of 45 tons per hour.
- (77) One (1) iron feeder, identified as EU207, constructed in 1962, with a nominal capacity of 45 tons per hour.
- (78) One (1) covered cross belt, identified as EU208, constructed in 1962, with a nominal capacity of 45 tons per hour.
- (79) One (1) covered raw mill feed belt, identified as EU209, constructed in 1962, with a nominal capacity of 175 tons per hour, with emissions controlled by a baghouse, identified

as baghouse 105 and CE201, and exhausting to one (1) stack identified as EP201.

- (80) Transfer screw to raw mill, identified as EU212, constructed in 1962, with a nominal capacity of 15 tons per hour.
- (81) One (1) east short covered screw, identified as EU215, constructed in 1962, with a nominal capacity of 15 tons per hour.
- (82) One (1) E-W long covered screw, identified as EU216, constructed in 1962, with a nominal capacity of 15 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as baghouse 105 and CE405, and exhausting to one (1) stack, identified as EP405.

Unloading Station Facilities

- (83) Railroad unloading, identified as EU307, commenced operation in 1962.
- (84) One (1) unloading station hopper, identified as EU308, constructed in 1962.
- (85) One (1) belt feeder, identified as EU309, constructed in 1962.
- (86) Belt 7 covered conveyor, identified as EU310, constructed in 1962.
- (87) Conveyor transfer to outside storage, identified as EU311, constructed in 1962.

Fossil Fuel Facilities

- (88) One (1) spare belt feeder to belt 8, identified as EU317, constructed in 1962.
- (89) One (1) coal/coke belt feeder to belt 8, identified as EU318, constructed in 1962.
- (90) Belt 8 to coal/coke tanks, identified as EU319, constructed in 1962.
- (91) One (1) coal/coke tank #1, identified as EU320, constructed in 1962.
- (92) Belt feed to coal mill #1, identified as EU321, constructed in 1962.
- (93) Coal/Coke cross belt, identified as EU322, constructed in 1962.
- (94) One (1) coal/coke tank #2, identified as EU323, constructed in 1962.
- (95) Belt feed to coal mill #2, identified as EU324, constructed in 1962.

Kiln #1 and kiln #2 Clinker Handling Facilities

- (96) One (1) #1 clinker drag conveyor, identified as EU501, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 109 and CE501, and exhausting to one (1) stack identified as EP501.
- (97) #1 CCDC screws, identified as EU502, constructed in 1962.

- (98) #1 clinker elevator, identified as EU503, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 109 and CE501, and exhausting to one (1) stack identified as EP501.
- (99) Clinker conveyor transfer system, identified as EU504, constructed in 1962 and modified in 1975, with emissions controlled by a baghouse, identified as baghouse 110 and CE502, and exhausting to one (1) stack identified as EP502.

Kiln #2 Clinker Handling Facilities

- (100) #2 clinker drag conveyor, identified as EU516, constructed in 1964, with emissions controlled by two (2) baghouses, identified as baghouse 112 and CE503 and baghouse 113 and CE504, and exhausting to two (2) stacks identified as EP503 and EP504 respectively.
- (101) #2 CCDC screw conveyor, identified as EU517 constructed in 1964.
- (102) #2 clinker elevator, identified as EU518, constructed in 1964, with emissions controlled by two baghouses, identified as baghouse 112 and CE503 and as baghouse 113 and CE504, and exhausting to two (2) stacks identified as EP503 and EP504 respectively.
- (103) Clinker conveyor transfer system circuit, identified as EU519, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 113 and CE504, and exhausting to one (1) stack identified as EP504.

Finish Mill #1 Facilities

- (104) Clinker bin #1 feeder, identified as EU508, constructed in 1962.
- (105) Stone/clinker bin 2 feeder, identified as EU509, constructed in 1962.
- (106) One (1) gypsum feed belt, identified as EU511, constructed in 1962.
- (107) One (1) finish mill #1 feed belt, identified as EU601, constructed in 1962, with a nominal capacity of 45.0 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 114 and CE601, and exhausting to one (1) stack, identified as EP601.
- (108) one (1) finish mill #1 circuit, identified as EU602, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 116 and CE602, and exhausting to one (1) stack identified as EP602.
- (109) One (1) separator, cooler #1 and transfer, identified as EU603, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 115 and CE603, and exhausting to one (1) stack identified as EP603.

Finish Mill #2 Facilities

- (110) Clinker bin 1 feeder, identified as EU523, constructed in 1964.
- (111) Clinker bin 2 feeder, identified as EU524, constructed in 1964.

- (112) FM #2 gypsum feeder, identified as EU525, constructed in 1964.
- (113) One (1) finish mill #2 feed belt, identified as EU604, constructed in 1964, with a nominal capacity of 45.0 tons per hour, with PM emissions controlled by two (2) baghouses, identified as baghouses 117a (CE604a) and 117b (CE604b) respectively, and exhausting to one (1) stack, identified as EP604.
- (114) One (1) finish mill #2 circuit, identified as EU605, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 119 and CE605, and exhausting to one (1) stack identified as EP605.
- (115) One (1) separator, cooler #2 and transfer, identified as EU606, constructed in 1964, with emissions controlled by a baghouse, identified as baghouse 118 and CE606, and exhausting to one (1) stack identified as EP606.

Finish Product Silo Storage Facilities

- (116) Silos 11/12/13/14/16/17/18, identified as EU704, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 126 and CE704, and exhausting to one (1) stack identified as EP704.
- (117) Silos 1/ 2/3/4/5/6/7, identified as EU709, constructed in 1961, with emissions controlled by a baghouse, identified as baghouse 122 and CE709, and exhausting to one (1) stack identified as EP709.
- (118) Silos 8/9/10, identified as EU711, constructed in 1961, with emissions controlled by a baghouse, identified as baghouse 124 and CE711, and exhausting to one (1) stack identified as EP711.

Finish Product Silo Transfer Operations

- (119) Truck/Railroad car unloading and internal transfers to silos, identified as EU701 and EU702, commenced operation in 1962, with emissions controlled by two (2) baghouses, identified as baghouse 132 and CE701 and as baghouse 133 and CE702, and exhausting to two (2) stacks identified as EP701 and EP702 respectively.

Finish Product Loadout Old Silos (West) Operation

- (120) Bulk truck loadout, identified as EU712, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 129 and CE712, and exhausting to one (1) stack identified as EP712.
- (121) Bulk railroad loadout, identified as EU713, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 130 and CE713, and exhausting to one (1) stack identified as EP713.

Finish Product Loadout New Silos (East) Operation

- (122) Bulk truck loadout, identified as EU706, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 131 and CE706, and exhausting to one (1) stack

identified as EP706.

Finish Product Masonry Packing

- (123) Transfer to masonry packer, identified as EU801, constructed in 1965, with emissions controlled by two (2) baghouses, identified as baghouse 128 and CE801 and as baghouse 139 and CE802, and exhausting to two (2) stacks identified as EP801 and EP802 respectively.
- (124) One (1) masonry packer, identified as EU802, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 128 and CE801, and exhausting to one (1) stack identified as EP801.
- (125) Transfer to pallets/storage (masonry), identified as EU803, constructed in 1965.

Finish Product Portland Packing

- (126) Transfer to portland packer, identified as EU804, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 127 and CE803, and exhausting to one (1) stack identified as EP803.
- (127) One (1) portland packer, identified as EU805, constructed in 1962, with emissions controlled by a baghouse, identified as baghouse 127 and CE803, and exhausting to one (1) stack identified as EP803.
- (128) Transfer to pallets/storage (portland), identified as EU806, constructed in 1962.

Kiln #1 and Kiln #2 Facilities

- (129) One (1) wet process rotary cement kiln #1, identified as EU401, constructed in 1962, with a nominal heat input of 245 million Btu per hour, with a nominal production rate of 42.0 tons per hour (as clinker), with PM emissions controlled by one (1) electrostatic precipitator (ESP #1), identified as CE401, and exhausting to one (1) stack, identified as EP401. Raw material sources include clay, sand, limestone, and other sources of silica, alumina, iron, calcium, magnesium, and trace elements. As part of the semi-direct firing system, a pulverizing mill is used to grind the solid fuels that are used in the kiln. The pulverizing mill exhausts to the kiln.
- (130) One (1) wet process rotary cement kiln #2, identified as EU413, constructed in 1964, with a nominal heat input of 245 million Btu per hour, with a nominal production rate of 42.0 tons per hour (as clinker), with PM emissions controlled by one (1) electrostatic precipitator (ESP #1), identified as CE401, and exhausting to one (1) stack, identified as EP401. Raw material sources include clay, sand, limestone, and other sources of silica, alumina, iron, calcium, magnesium, and trace elements. As part of the semi-direct firing system, a pulverizing mill is used to grind the solid fuels that are used in the kiln. The pulverizing mill exhausts to the kiln.

Clinker Cooler #1 Facilities

- (131) One (1) clinker cooler #1, identified as EU412, constructed in 1962, with a nominal

production rate of 42.0 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 107 and CE404, and exhausting to one (1) stack, identified as EP404.

Clinker Cooler #2 Facilities

- (132) One (1) clinker cooler #2, identified as EU421, constructed in 1962, with a nominal production rate of 42.0 tons per hour, with PM emissions controlled by one (1) baghouse, identified as baghouse 111 and CE407, and exhausting to one (1) stack, identified as EP404.

CKD –To-Finish Mill (CKD2FM) Recycling Operations

- (133) One (1) waste dust tank, constructed in 1962, modified in 2005 with the addition of one (1) CKD2FM surge system, collectively identified as EU406, with emissions controlled by a baghouse, constructed in 2005, identified as baghouse 142 and CE901, and exhausting to one (1) stack identified as EP901.
- (134) One (1) CKD2FM recycling storage tank system, identified as EU902, constructed in 2005, with particulate emissions controlled by one (1) baghouse, identified as baghouse 143 and CE902, and exhausting to one (1) stack, identified as EP902.
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903, constructed in 2005.
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904, constructed in 2005.

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

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]
- (2) waste fuel operations; [40 CFR 63, Subpart DD] [40 CFR 61, Subpart FF]

This stationary source also includes other insignificant activities as defined at 326 IAC 2-7-1(21) identified in the Technical Support Document for this permit that are not specifically regulated hereunder.

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

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, 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.

B.3 Enforceability [326 IAC 2-7-7]

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.4 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.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 authorized by law that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (b) 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) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operations and Maintenance (O&M) 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, 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 Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) 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 in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

- (b) In addition to the nonapplicability determinations set forth in Section D of this permit, the IDEM, OAQ has made the following determinations regarding this source:
- (1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.
 - (2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as volatile organic liquid (VOL).
 - (3) The quarry activities and the raw material sizing facilities listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior to the applicability date of August 31, 1983.
 - (4) None of the other facilities listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).
 - (5) None of the facilities listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.
- (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)(7)]

B.13 Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

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

B.16 Permit Renewal [326 IAC 2-7-4]

- (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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) 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.
- (2) If IDEM, OAQ, upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation, or removal of a nonroad engine, as defined in 40 CFR 89.2.

**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 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)(D)(i) 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), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 which document, on a rolling five (5) year basis, all such changes and emission trades that are subject to 326 IAC 2-7-

20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

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

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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

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

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(a)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 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 when conducting any asbestos abatement project covered by those rules.

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

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

not later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source 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.10 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. 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. The Permittee shall have the right to seek administrative or judicial review of an order to test.

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days after permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

C.12 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 time and reason of the breakdown and efforts made to correct the problem.

C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or is down for maintenance or repairs, the following shall be used as an alternative to continuous data collection:
 - (1) If the CEM is required for monitoring NOX or SO2 emissions pursuant to 40 CFR 75 (Title IV Acid Rain program) or 326 IAC 10-4 (NOX Budget Trading Program), the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.
 - (2) If the CEM is not used to monitor NOX or SO2 emissions pursuant to 40 CFR 75 or 326 IAC 10-4, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 40 CFR 63, Subpart EEE.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.16 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 26, 1980.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) 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.17 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 source must comply with the applicable requirements of 40 CFR 68.

C.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) 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). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) 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.

- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.20 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 purposes 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
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (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. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days after permit issuance.
- (c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq)) 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(rr)(2)(A)(iii); and
- (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (2) 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
- (3) 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.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx)), for that regulated NSR pollutant, and

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

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (h) 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.

C.23 NESHAP Notification and Reporting Requirements [40 CFR Part 63, Subparts A, EEE, and LLL]

The Permittee shall comply with all reporting provisions specified in 40 CFR Part 63, Subparts EEE and LLL, and in particular:

- (a) The Permittee shall submit an initial notification in accordance with 40 CFR 63.9(b) (Subpart A, General Provisions) immediately. In 40 CFR 63.9(b), the Permittee is required to provide the following information:
 - (1) The name and address of the Permittee;
 - (2) The address (i.e., physical location) of the affected source;
 - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - (4) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
 - (5) A statement of whether the affected source is a major source or an area source.
- (b) The Permittee shall submit a notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e).

- (c) The Permittee shall submit a notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).
- (d) The Permittee shall submit notification, as required by 40 CFR 63.9(g), of the date that continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.
- (e) The Permittee shall submit notification of compliance status, as required by 40 CFR 63.9(h).
- (f) The notification(s) required in this section shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

Quarrying and Raw Material/Clinker Stockpile Operations

- (1) Drilling and blasting, identified as EU101 and EU102 respectively.
- (2) One (1) limestone stockpile, identified as EU103.
- (3) Two (2) reclaimed clay stockpiles, identified as EU104 and EU105.
- (4) Two (2) wet flyash stockpiles, identified as EU106 and EU107.
- (5) Carhoe Missouri clay unloading, identified as EU108.
- (6) Truck to quarry loading, identified as EU109.
- (7) One (1) Mo. clay stockpile, identified as EU110.
- (8) One (1) alternate materials stockpile, identified as EU111.
- (9) One (1) overburden clay stockpile, identified as EU128.
- (10) One (1) iron stockpile, identified as EU301.
- (11) Iron unloading, identified as EU302.
- (12) One (1) gypsum stockpile, identified as EU303.
- (13) Gypsum unloading, identified as EU304.
- (14) One (1) coal/coke stockpile, identified as EU305.
- (15) Coal/coke unloading, identified as EU306.
- (16) One (1) coal/coke crane storage stockpile, located outside, identified as EU312.
- (17) Coal/coke unloading, identified as EU313.
- (18) Outside clinker storage stockpile, identified as EU512.
- (19) Special clinker stockpile, identified as EU513.
- (20) Clinker loading, identified as EU514.
- (21) Special clinker stockpile (crushed), identified as EU515.

Raw Material Sizing Operations

- (22) Raw material loading, identified as EU112.
- (23) Quarry haul road, identified as EU113.
- (24) Raw material unloading, identified as EU114.
- (25) One (1) apron feeder transfer to primary crusher, identified as EU115.
- (26) One (1) primary crusher, identified as EU116.
- (27) One (1) clean-up screw, identified as EU117.
- (28) One (1) impact apron feeder, identified as EU118.
- (29) Belt 1 covered conveyor, identified as EU119.
- (30) Screen transfers, identified as EU120.
- (31) Belt 2 covered conveyor, identified as EU121.
- (32) One (1) secondary crusher, identified as EU122.
- (33) Belt 3 covered conveyor, identified as EU201.

CKD –Silo Storage Facilities

- (49) One (1) silo, Silo 15, identified as EU905.

Waste CKD Disposal Operations

- (50) Truck unloading, identified as EU407.
- (51) One (1) cement kiln dust haul road system, identified as EU422.
- (52) One (1) cement kiln dust pile, identified as EU423.

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

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

D.1.1 PSD Minor Limits [326 IAC 2-2]

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

- (a) The PM emission rate from Silo 15, identified as EU905, shall not exceed 0.72 pounds per ton of CKD throughput.
- (b) The PM10 emission rate from Silo 15, identified as EU905, shall not exceed 0.46 pounds per ton of CKD throughput.
- (c) The Permittee shall limit the throughput of CKD per twelve consecutive month period, with compliance determined at the end of each month, according to the following:

| Emission Unit | CKD Throughput (tons) |
|--|-----------------------|
| Silo 15 (EU905) Described in Section D.1 | 65,000 (combined) |
| CKD2FM recycling storage tank system (EU902) Described in Section D.2 | |

Compliance with the above limits, along with the limits in Condition D.2.1, will ensure that total PM and PM10 emissions from Minor Source Modification 017-22319-00005 are less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

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

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The allowable PM emission rate from the raw material sizing facilities (EU112, EU114 through EU122, and EU201) shall not exceed 70.1 pounds per hour when operating at a process weight rate of 550 tons per hour.
- (b) The allowable PM emission rate from the waste CKD disposal operations (EU407 and EU905) shall not exceed 39.96 pounds per hour (total for all units combined) when operating at a combined process weight rate of 30 tons per hour.

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

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

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

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

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

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

D.1.3 Determinations of Nonapplicability [40 CFR 60, Subparts A, F, and OOO] [40 CFR 63, Subparts A and LLL]

- (a) None of the facilities/emission units listed in this section 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 were constructed prior to the applicability date of August 17, 1971.
- (b) None of the quarry facilities/emission units or raw material sizing facilities/emission units listed in this section 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.
- (c) None of the cement kiln dust storage and handling facilities/emission units listed in this section 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.
- (d) None of the facilities at ESSROC are subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60, Subpart OOO for Nonmetallic Mineral Processing Plants, because they were constructed prior the applicability date of August 31, 1983 or they are subject to 40 CFR 60.60 (Subpart F).

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the emission control devices listed in this section.

Compliance Determination Requirements

D.1.5 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with D.1.2 and D.1.4, the baghouses for particulate control shall be in operation and control emissions at all times its associated facility is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether visible emissions are present.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of visible emissions for that specific process.
- (e) If abnormal missions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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 at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

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

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per day and of the visible emission notations of the quarry activities once per day.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the pressure drop once per day during normal operation when venting to the atmosphere:

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

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

Kiln #1 Recycled CKD Operations

- (34) #1 recycled dust elevator, identified as EU408.
- (35) One (1) recycled dust holding tank, identified as EU409.
- (36) One (1) feeder screw and F-K pump, identified as EU410.
- (37) #1 recycled dust scoop/insufflation system, identified as EU411.

Kiln #1 Waste CKD Operations

- (38) five (5) discharge hopper screws, identified as EU402.
- (39) one (1) covered 16" cross screw, identified as EU403.
- (40) One (1) #1 waste dust elevator, identified as EU404.
- (41) One (1) 9" cross screw, identified as EU405.

Kiln #2 Recycled CKD Operations

- (42) #2 recycled dust elevator, identified as EU417.
- (43) One (1) recycled dust holding tank, identified as EU418.
- (44) One (1) feeder screw and F-K pump, identified as EU419.
- (45) #2 recycled dust scoop system/insufflation system, identified as EU420.

Kiln #2 Waste CKD Operations

- (46) five (5) discharge hopper screws, identified as EU414.
- (47) 16" covered cross screws, identified as EU415.
- (48) #2 waste dust elevator, identified as EU416.

Clay Processing Operations

- (53) Clay unloading to hopper, identified as EU123.
- (54) One (1) wobbler feeder for transferring clay to the log washer system, identified as EU124.
- (55) One (1) log washer system, identified as EU125.
- (56) One (1) waste gravel pile, identified as EU126.
- (57) Loading waste gravel into trucks, identified as EU127.

Crane Storage Facilities

- (58) Three (3) limestone storage bins, identified as EU202.
- (59) One (1) Missouri clay storage bin, identified as EU203.
- (60) One (1) iron storage bin, identified as EU204.
- (61) West flyash truck unloading utilizing pneumatic conveying, identified as EU210.
- (62) One (1) inside west flyash holding tank, identified as EU211.
- (63) East flyash truck unloading utilizing pneumatic conveying, identified as EU213.
- (64) One (1) east flyash storage bin, identified as EU214.
- (65) One (1) spare storage bin, identified as EU314.
- (66) One (1) coal/coke storage bin, identified as EU315.
- (67) Two (2) gypsum storage bins, identified as EU316.
- (68) Clinker bin 1 finish mill #1, identified as EU505.
- (69) Stone/clinker bin 2 finish mill #1, identified as EU506.
- (70) Clinker bin 3 finish mill #1, identified as EU507.
- (71) Crane unloading, identified as EU510.
- (72) Clinker bin 1 #2 finish mill, identified as EU520.
- (73) Clinker bin 2 #2 finish mill, identified as EU521.
- (74) Bin 1 clinker spill pile, identified as EU522.

Raw Mill Facilities

- (75) Three belt feeders, identified as EU205.
- (76) One (1) Missouri clay belt feeder, identified as EU206.
- (77) One (1) iron feeder, identified as EU207.
- (78) One (1) covered cross belt, identified as EU208.
- (79) One (1) covered raw mill feed belt, identified as EU209.
- (80) Transfer screw to raw mill, identified as EU212.
- (81) One (1) east short covered screw, identified as EU215.
- (82) One (1) E-W long covered screw, identified as EU216.

Unloading Station Facilities

- (83) Railroad unloading, identified as EU307.
- (84) One (1) unloading station hopper, identified as EU308.
- (85) One (1) belt feeder, identified as EU309.
- (86) Belt 7 covered conveyor, identified as EU310.
- (87) Conveyor transfer to outside storage, identified as EU311.

Fossil Fuel Facilities

- (88) One (1) spare belt feeder to belt 8, identified as EU317.
- (89) One (1) coal/coke belt feeder to belt 8, identified as EU318.
- (90) Belt 8 to coal/coke tanks, identified as EU319.
- (91) One (1) coal/coke tank #1, identified as EU320.
- (92) Belt feed to coal mill #1, identified as EU321.
- (93) Coal/Coke cross belt, identified as EU322.
- (94) One (1) coal/coke tank #2, identified as EU323.
- (95) Belt feed to coal mill #2, identified as EU324.

Kiln #1 Clinker Handling Facilities

- (96) One (1) #1 clinker drag conveyor, identified as EU501.
- (97) #1 CCDC screws, identified as EU502.
- (98) #1 clinker elevator, identified as EU503.
- (99) Clinker conveyor transfer system, identified as EU504.

Kiln #2 Clinker Handling Facilities

- (100) #2 clinker drag conveyor, identified as EU516.
- (101) #2 CCDC screw conveyor, identified as EU517.
- (102) #2 clinker elevator, identified as EU518.
- (103) Clinker conveyor transfer system circuit, identified as EU519.

Finish Mill #1 Facilities

- (104) Clinker bin #1 feeder, identified as EU508.
- (105) Stone/clinker bin 2 feeder, identified as EU509.
- (106) One (1) gypsum feed belt, identified as EU511.
- (107) One (1) finish mill #1 feed belt, identified as EU601.
- (108) One (1) finish mill #1 circuit, identified as EU602.
- (109) One (1) separator, cooler #1 and transfer, identified as EU603.

Finish Mill #2 Facilities

- (110) Clinker bin 1 feeder, identified as EU523.
- (111) Clinker bin 2 feeder, identified as EU524.
- (112) FM #2 gypsum feeder, identified as EU525.
- (113) One (1) finish mill #2 feed belt, identified as EU604.
- (114) One (1) finish mill #2 circuit, identified as EU605.
- (115) One (1) separator, cooler #2 and transfer, identified as EU606.

Finish Product Silo Storage Facilities

- (116) Silos 11/12/13/14/16/17/18, identified as EU704.
- (117) Silos 1/2/3/4/5/6/7 identified as EU709.
- (118) Silos 8/9/10, identified as EU711.

Finish Product Silo Transfer Operations

- (119) Truck/Railroad car unloading and internal transfers to silos, identified as EU701 and EU702.

Finish Product Loadout Old Silos (West) Operation

- (120) Bulk truck loadout, identified as EU712.
- (121) Bulk railroad loadout, identified as EU713.

Finish Product Loadout New Silos (East) Operation

- (122) Bulk truck loadout, identified as EU706.

Finish Product Masonry Packing

- (123) Transfer to masonry packer, identified as EU801.
- (124) One (1) masonry packer, identified as EU802.
- (125) Transfer to pallets/storage (masonry), identified as EU803.

Finish Product Portland Packing

- (126) Transfer to portland packer, identified as EU804.
- (127) One (1) portland packer, identified as EU805.
- (128) Transfer to pallets/storage (portland), identified as EU806.

CKD –To-Finish Mill (CKD2FM) Recycling Operations

- (133) One (1) waste dust tank, and one (1) CKD2FM surge system, collectively identified as EU406.
- (134) One (1) CKD2FM recycling storage tank system, identified as EU902.
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903.
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904.

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

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

D.2.1 PSD Minor Limits [326 IAC 2-2]

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

- (a) PM and PM10 emissions shall be limited as follows:

| Emission Unit | PM | PM10 |
|--|--------------------------|---------------------------|
| CKD2FM recycling storage tank system (EU902) | 0.72 (lb/ton of CKD) | 0.46 (lb/ton of CKD) |
| CKD2FM #1 FM recycling system (EU903) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |

| Emission Unit | PM | PM10 |
|---------------------------------------|--------------------------|---------------------------|
| CKD2FM #2 FM recycling system (EU904) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |

- (b) The Permittee shall limit the throughput of CKD per twelve consecutive month period, with compliance determined at the end of each month, according to the following:

| Emission Unit | CKD Throughput (tons) |
|--|-----------------------|
| Silo 15 (EU905) Described in Section D.1 | 65,000 (combined) |
| CKD2FM recycling storage tank system (EU902) | |
| CKD2FM #1 FM recycling system (EU903) | 65,000 (combined) |
| CKD2FM #2 FM recycling system (EU904) | |

Compliance with the above limits, along with the limits in Condition D.1.1, will ensure that total PM and PM10 emissions from Minor Source Modification 017-22319-00005 are less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The allowable PM emission rate from the kiln #1 recycled CKD operations (EU408 through EU411) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.
- (b) The allowable PM emission rate from the kiln #1 waste CKD operations (EU402 through EU405) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.
- (c) The allowable PM emission rate from the kiln #2 waste CKD operations (EU414 through EU416) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.
- (d) The allowable PM emission rate from the kiln #2 recycled CKD operations (EU417 through EU420) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.
- (e) The allowable PM emission rate from the clay processing facilities (EU123 through EU125, and EU127) shall not exceed 39.96 pounds per hour (total for all units combined) when operating at a process weight rate of 30 tons per hour.
- (f) The allowable PM emission rate from the raw material storage process (EU202, EU204, EU210, EU211, EU213 and EU214) shall not exceed 58.51 pounds per hour (total for all units combined) when operating at a process weight rate of 200 tons per hour.

- (g) The allowable PM emission rate from the process for transferring clinker from storage bins to finish mills (EU505 through EU509, EU511, EU520, EU521, and EU523 through EU525) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- (h) The allowable PM emission rate from the raw mill facilities (EU205-209 and EU212, and EU215 and EU216) shall not exceed 57.07 pounds per hour (total for all units combined) when operating at a process weight rate of 175 tons per hour.
- (i) The allowable PM emission rate from the unloading station facilities (EU307 through EU311) shall not exceed 58.51 pounds per hour (total for all units combined) when operating at a process weight rate of 200 tons per hour.
- (j) The allowable PM emission rate from the fossil fuel facilities (EU314 through EU324) shall not exceed 58.51 pounds per hour (total for all units combined) when operating at a process weight rate of 200 tons per hour.
- (k) The allowable PM emission rate from the kiln #1 clinker handling facilities (EU501 through EU504) shall not exceed 42.97 pounds per hour (total for all units combined) when operating at a process weight rate of 42 tons per hour.
- (l) The allowable PM emission rate from the kiln #2 clinker handling facilities (EU516 through EU519) shall not exceed 42.97 pounds per hour (total for all units combined) when operating at a combined process weight rate of 42 tons per hour.
- (m) The allowable PM emission rate from the finish mill #1 (EU601 through EU603) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- (n) The allowable PM emission rate from the finish mill #2 (EU604 through EU606) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- (o) The allowable PM emission rate from the silos (EU703 through EU705 and EU707 through EU711) shall not exceed 66.89 pounds per hour (total for all units combined) when operating at a process weight rate of 420 tons per hour.
- (p) The allowable PM emission rate from the west bulk truck loadout (EU712) shall not exceed 67.7 pounds per hour when operating at a process weight rate of 450 tons per hour.
- (q) The allowable PM emission rate from the east bulk truck loadout (EU706) shall not exceed 67.7 pounds per hour when operating at a process weight rate of 450 tons per hour.
- (r) The allowable PM emission rate from the truck/RR car unloading process and internal transfer to silos (EU701 and EU702) shall not exceed 51.28 pounds per hour (total for both units combined) when operating at a process weight rate of 100 tons per hour.

- (s) The allowable PM emission rate from the bulk RR loadout process (EU713) shall not exceed 51.28 pounds per hour when operating at a process weight rate of 100 tons per hour.
- (t) The allowable PM emission rate from the finish product masonry packing (EU801 through EU803) shall not exceed 43.4 pounds per hour (total for all units combined) when operating at a process weight rate of 44 tons per hour.
- (u) The allowable PM emission rate from the finish product portland packing (EU804 through EU806) shall not exceed 43.4 pounds per hour (total for all units combined) when operating at a process weight rate of 44 tons per hour.
- (v) The allowable PM emission rate from the waste dust tank, and CKD2FM surge system (EU406) shall not exceed 39.96 pounds per hour when operating at a process weight rate of 30 tons per hour.
- (w) The allowable PM emission rate from the CKD2FM recycling storage tank system, and CKD2FM #1FM and #2FM shall not exceed 24.03 pounds per hour (total for all units combined) when operating at a process weight rate of 14 tons per hour.

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

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

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

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

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

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

D.2.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

Except when otherwise specified in 40 CFR Part 63, Subpart LLL, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to all the facilities described in this section, except for the open/unenclosed material stockpiles and haul roads.

D.2.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

The NESHAP 40 CFR 63, Subpart LLL and 326 IAC 20-27-1 applies to all of the emission units listed in this section, except for the open/unenclosed material stockpiles and haul roads. Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the affected facilities listed in this section shall not exceed ten percent (10%) opacity.

D.2.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]

None of the facilities listed in this section, except for the east and west flyash truck unloading facilities (EU210 and EU213), 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 were constructed prior to the applicability date of August 17, 1971.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the emission control devices listed in this section.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

(a) For affected sources existing on or before June 14, 2002:

No later than 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limits established in Condition D.2.4 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing.

(b) For affected sources modified or constructed after June 14, 2002:

No later than 90 day after start-up, the Permittee shall demonstrate initial compliance with the limits established in Condition D.2.4 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing.

(c) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM testing on the Finish mill #1 (EU601 through EU603), Finish mill #2 (EU604 through EU606), and Raw Mills (EU205 through EU209, EU212, EU215, and EU216) utilizing methods as approved by the Commissioner. These tests shall be conducted within 180 days after issuance of this Part 70 permit. These tests shall be repeated at least once every five years. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.8 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with D.2.1 and D.2.3, the baghouses for particulate control shall be in operation and control emissions at all times their associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to

normal, and the results of any response actions taken up to the time of notification.

D.2.9 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for each affected source by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, or before startup for affect sources modified or constructed after June 14, 2002. The plan shall include the following information:
- (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.2.3; and
 - (2) Procedures to be used to periodically monitor the facilities listed in this section, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source except for the finish mills and raw mills, in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.
 - (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.
 - (3) Corrective actions to be taken when required by paragraph (b).

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

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall monitor

opacity from the raw mills and finish mills by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must 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, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

- (c) The requirement to conduct Method 22 visible emissions monitoring under this paragraph [40 CFR 63.1350(a)(4)] 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.
- (d) For any partially enclosed or unenclosed conveying system transfer point located in a building, the Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs 40 CFR 63.1350(a)(4)(i) through (iv) for each such conveying system transfer point located within the building, or for the building itself [according to paragraph 40 CFR 63.1350(a)(4)(vii)]. If visible emissions from a building are monitored, the requirements of paragraphs 40 CFR 63.1350(a)(4)(i) through (iv) apply to the monitoring of the building, and the Permittee must also do the following: 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.

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

D.2.10 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouse stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether visible emissions are present.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of visible emissions for that specific process.
- (e) On days that the NESHAP monitoring required in Condition D.2.9 is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.
- (f) If abnormal missions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.2.11 Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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 at least once every six (6) months.

D.2.12 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 emissions unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.10, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per day.
- (b) To document compliance with Condition D.2.11, the Permittee shall maintain records of

the pressure drop once per day during normal operation when venting to the atmosphere:

- (c) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.14 Reporting Requirements

- (a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.2.9 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry or before startup for affect sources modified or constructed after June 14, 2002. .
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee

during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

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

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

Pursuant to 40 CFR 63.10(d)(5)(i) and (ii), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

(129) One (1) wet process rotary cement kiln #1, identified as EU401.

(130) One (1) wet process rotary cement kiln #2, identified as EU413.

As an alternative operating scenario (listed in Condition D.3.4), when a kiln is combusting non-hazardous waste fuels, the source may choose to operate the kilns in compliance with the alternate emission limitations.

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

- (a) Pursuant to 326 IAC 7-1.1 (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 demonstrated on a calendar month average.
- (b) Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of fuel 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 demonstrated on a calendar month average.

D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, and listed in Table 1 of 40 CFR 63, Subpart EEE, apply to kiln #1 and kiln #2 described in this section except when otherwise specified in 40 CFR Part 63, Subpart EEE.

D.3.3 NESHAP Emissions Limitation [40 CFR Part 63, Subpart EEE]

Pursuant to 40 CFR 63.1204 (Emissions Standards and Operating Limits), on and after September 30, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Hazardous Waste Combustors, kiln #1 and kiln #2 shall be limited as follows:

- (1) Dioxin/Furan emissions shall be limited to 0.20 nanograms (TEQ) per dry standard cubic meter corrected to seven percent oxygen; or 0.40 nanograms (TEQ) per dry standard cubic meter corrected to seven percent oxygen, provided that the average combustion gas temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or lower based on the average of the test run average temperatures.
- (2) Mercury emissions shall be limited to 120 micrograms/dscm corrected to seven percent oxygen.
- (3) Lead and cadmium combined emissions shall be limited to 330 micrograms/dscm corrected to seven percent oxygen.
- (4) Arsenic, beryllium, and chromium combined emissions shall be limited to 56 micrograms/dscm corrected to seven percent oxygen.

- (5) Hydrocarbons in the main stack shall not exceed 20 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to seven percent oxygen, and reported as propane; or
- (6) Hydrochloric acid and chlorine gas combined emissions shall not exceed 130 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis, corrected to seven percent oxygen.
- (7) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln.
- (8) Visible emissions shall be limited to twenty percent (20%) opacity.

D.3.4 Alternate Emission Limitations [40 CFR Part 63.1206, Subpart EEE]

- (I) Pursuant to 40 CFR 63, Subpart EEE, the emission standards and operating requirements of 40 CFR 63, Subpart EEE, shall not apply during those periods of operation when hazardous waste is not in the combustion chamber and the Permittee has documented in the operating record that the source is complying with such applicable requirements in lieu of the emission standards and operating requirements of this subpart.
- (II) During those periods of operation when hazardous waste is not in the combustion chamber and the Permittee has complied with (a) and (b) above, the following conditions shall apply instead of the limits listed in Condition D.3.3.
 - (a) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to each kiln.
 - (b) Visible emissions shall be limited to twenty percent (20%) opacity.
 - (c) Dioxin/Furan emissions shall be limited to 0.20 nanograms (TEQ) per dry standard cubic meter corrected to seven percent oxygen; or 0.40 nanograms (TEQ) per dry standard cubic meter corrected to seven percent oxygen, provided that the average combustion gas temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or lower based on the average of the test run average temperatures.
 - (d) The kilns shall be operated such that the temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.3.9.

D.3.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]

The kilns #1 and #2 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 were constructed prior to the applicability date of August 17, 1971.

D.3.6 National Emission Standard for Benzene Waste Operations [40 CFR Part 61, Subpart FF]

Pursuant to 40 CFR 61, Subpart FF - National Emissions Standard for Benzene Waste Operations, the Permittee shall be exempt from the requirements of 40 CFR 61.342(b) and (c) and Condition D.3.6 of this permit, if the total annual benzene quantity from the facility waste is less than 10 megagrams per year (Mg/yr).

- (a) The Permittee shall design, install, operate and maintain the kilns to destroy the benzene

contained in waste streams meeting the criteria specified in 40 CFR 61.340(b).

- (b) Pursuant to 40 CFR 61.348(a)(1)(iii), the Permittee shall destroy the benzene in the waste stream by utilizing one of the methods described in 40 CFR 61.348(a)(1)(i), (ii), and/or (iii).
- (c) As provided in 40 CFR 61.348(a)(4), the Permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with part (a) of this condition.
- (d) Pursuant to 40 CFR 61.348(c), the Permittee shall demonstrate that each treatment process, except as provided by 40 CFR 61.348(d), achieves the appropriate conditions specified in 40 CFR 61.348(a) or (b) in accordance with 40 CFR 61.348(c)(1) or (2)
 - (1) A treatment process is in compliance with the requirements of 40 CFR 61.348(c) and Condition D.3.6(c) of this permit provided that the Permittee documents that the treatment process or waste stream is in compliance with 40 CFR 61.348(c)(1), (2), (3), (4) or (5).
- (e) Pursuant to 40 CFR 61.348(e), except as specified in paragraph 40 CFR 61.348(e)(3), if the treatment process has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (gasketed, latched, etc.) and kept closed at all times when the waste is being treated, except during inspection and maintenance.
- (f) Pursuant to 40 CFR 61.348(g), except for a treatment process or waste stream complying with 40 CFR 61.348(d), the treatment process that is used to comply with the provisions of 40 CFR 61.348 and Section D.3.6 of this permit shall monitor the unit in accordance with the applicable requirements of 40 CFR 61.354.

D.3.7 PSD Applicability for kilns [326 IAC 2-2-3] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]

The EPA has alleged an enforcement action that the kilns are subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided by Condition B.13 of this permit does not apply to the kilns with regards to 326 IAC 2-2 (PSD). If the enforcement action results in a settlement or determination that the kilns are subject to 326 IAC 2-2, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements.

D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.9 Testing Requirements [40 CFR 63, Subpart EEE] [326 IAC 2-7-6(1),(6)] [326 IAC 2-1-3(i)(8)] [326 IAC 2-1.1-11]

- (a) No later than six months after September 30, 2003, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Hazardous Waste Combustors, the Permittee shall demonstrate initial compliance with the emission limits established in Condition D.3.3 by commencing initial comprehensive performance tests in accordance with 40 CFR 63.1207 and Section C - Performance Testing. These tests shall also establish limits for the operating parameters provided by 40 CFR 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems. The testing must be completed within 60 days after the date of commencement. These tests shall be repeated at least once every 2.5 years from the

date of this valid compliance demonstration.

- (b) During each stack test required above, the following items shall be performed:
- (1) Certified continuous opacity monitoring (COM) data shall be observed and recorded or EPA Method 9 opacity tests shall be performed.
 - (2) The kiln temperature and oxygen concentration shall be measured and recorded.
 - (3) The kiln feed rate shall be measured and recorded.
 - (4) Pursuant to 326 IAC 3-6-3(b)(2), 40 CFR 63.7(e) and 40 CFR 63.1207(g), the tests shall be conducted under representative operating conditions.
 - (5) Pursuant to 326 IAC 3-6-3(b), during the performance tests, each kiln and clinker cooler must be operating at 95 percent of its maximum production capacity or more, or under other capacities or conditions specified and approved by IDEM, to be considered a valid test.
- (c) Unless EPA grants a waiver of the test requirement, the Permittee shall demonstrate that each cement kiln achieves ninety-nine percent (99%) destruction efficiency by conducting performance tests using test methods and procedures specified in 40 CFR 61.355(f), in order to demonstrate compliance with Condition D.3.6. This testing shall be performed at the same time as the testing required by paragraph (a) of this condition.

D.3.10 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with D.3.3 and D.3.4, the ESP for particulate control shall be in operation and control emissions from either kiln at all times either kiln is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

- (l) Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion or simultaneous combustion of coal and oil, do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance with the SO₂ limit in D.3.1(a) 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), (e); or
- (2) Sample and analyze the coal pursuant to 326 IAC 3-7-2(a); or
 - (3) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or
- (b) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)]
 - (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the kilns, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

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

- (II) Compliance with the limit in Condition D.3.1(b) shall be determined utilizing one of the following options.
 - (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
 - (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from each of the kilns and heaters, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

D.3.12 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 63, Subpart EEE] [326 IAC 2-7-6(1),(6)]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2 and 40 CFR 63, Subpart EEE, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from the kilns, pursuant to 326 IAC 3-5. The continuous monitoring system shall be installed and operational prior to conducting the performance tests required in Condition D.3.9. The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c).
- (b) Pursuant to 40 CFR 63, Subpart EEE, a continuous monitoring system shall be installed, calibrated, maintained, and operated to demonstrate compliance with the hydrocarbon limits specified in 40 CFR 63 and Condition D.3.3. An oxygen CEMS shall also be installed, calibrated, maintained, and operated to continuously correct the hydrocarbon levels to 7 percent oxygen.
- (c) The Permittee shall comply with all other monitoring requirements pursuant to 40 CFR 63, Subpart EEE.
- (d) In the event that a CEMS fails, the Permittee shall monitor the oxygen content and temperature of the kiln exhaust at least once per hour. If the oxygen content or temperature is outside the range established in the latest compliance stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.3.13 NESHAP Monitoring Requirements [40 CFR 63, Subpart EEE]

Pursuant to 40 CFR 63, Subpart EEE, on and after September 30, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hazardous Waste Combustors, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for kiln #1 and kiln #2. The plan shall include the following information:
 - (1) Procedures for proper operation, inspection, maintenance, and corrective measures for all components of kiln #1 and kiln #2 and associated air pollution control device(s) in order to meet the emissions limits in Conditions D.3.3 and D.3.4; and
 - (2) Procedures for operating and maintaining the kilns in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test.

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

- (b) The Permittee shall perform the monitoring requirements specified in 40 CFR 63.1209.

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

D.3.14 ESP Parametric Monitoring and ESP Inspections

- (a) The ability of the ESP to control particulate emissions shall be monitored once per day, when the kilns are in operation, by measuring and recording the number of T-R sets in service and the ESP total power.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances whenever the percentage of T-R sets in service falls below 90 percent (90%).

Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (c) The instrument used for determining the total power shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

D.3.15 Visible Emissions Notations

- (a) Whenever a COMS is malfunctioning or down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, and the process is operating,
 - (1) 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.
 - (A) 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.
 - (B) 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.
 - (C) Method 9 readings may be discontinued once a COM is online.
 - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (b) 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 63, Subpart EEE.

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

D.3.16 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1 and D.3.11, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken on a calendar month average and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.3.1.

- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual coal and fuel oil usage since last compliance determination period;
 - (3) Sulfur content and heat content of both the coal and the fuel oil;
 - (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 compliance with Conditions D.3.9, D.3.12, D.3.14, and D.3.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.3 and D.3.4.
- (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
 - (3) All ESP parametric monitoring readings.
 - (4) The results of all readings whenever required by D.3.15.
 - (5) All preventive maintenance measures taken.
 - (6) All response steps taken and the outcome for each.
- (d) To document compliance with the HWC NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1210 and 40 CFR 63.1211, including, but not limited to, the following:
- (1) The Permittee shall maintain files of all information (including all reports and notifications) required by this rule recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
- (e) The Permittee shall maintain the following records:
- (1) Pursuant to 40 CFR 61.356(e)(1), the Permittee shall maintain a statement signed and dated by the Permittee certifying that the treatment unit (cement kiln) is designed to operate at the documented performance level when the waste

stream entering the unit is at the highest stream flow rate and benzene content expected to occur. The documentation shall be retained for the life of the cement kilns.

- (2) Pursuant to 40 CFR 61.356(e)(2), if engineering calculations are used, the Permittee shall maintain all records necessary to demonstrate the cement kiln performance as specified in 40 CFR 61.356(e)(2).
- (3) Pursuant to 40 CFR 61.356(e)(3), if performance tests are used, the Permittee shall maintain all test information necessary to demonstrate the cement kiln performance as specified in 40 CFR 61.356(e)(3)(i) through (iv).
- (4) Pursuant to 40 CFR 61.356(i), the Permittee shall maintain documentation that includes the following information regarding the cement kiln operation:
 - (A) Dates of startup and shutdown of the units.
 - (B) For a process parameter monitored in accordance with 40 CFR 61.354(a)(2), the Permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the units will be operated in conformance with the standard in 40 CFR 61.348(c) and the units' design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the equipment.
 - (C) Periods when the units are not operated as designed.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.17 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with the SO₂ limit specified in Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. This report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7, from the continuous monitoring system, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. If applicable, the excess opacity summary shall also be submitted in accordance with 40 CFR 63.10(e)(3).
- (c) The Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.10(e)(3) and 40 CFR 63, Subpart A.
- (d) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi). If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.

- (e) To document compliance with the NESHAP 40 CFR 63, Subpart EEE, the Permittee shall report the information required by 40 CFR 63, Subpart EEE including, but not limited to the following:
- (1) Compliance progress reports as required by 40 CFR 63.1211(b) and 40 CFR 63.10(d)(4).
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1207.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
 - (6) Pursuant to 40 CFR 63.1206(c)(3)(vi), the Permittee shall report excessive exceedances.
 - (7) Pursuant to 40 CFR 63.1206(c)(4)(iv), the Permittee shall report emergency safety vent openings.
- (f) Pursuant to 40 CFR 61.357(d)(2), the Permittee shall submit to the US EPA and IDEM, OAQ an annual report containing the following information:
- (1) If the total annual benzene quantity from the facility waste is less than 1 Mg/yr (1.1 ton/yr), the applicable reporting requirements of 40 CFR 61.357(b);
 - (2) If the total annual benzene quantity from the facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 tons/yr), the applicable reporting requirements of 40 CFR 61.357(c);
 - (3) If the total annual benzene quantity from the facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), the applicable reporting requirements of 40 CFR

61.357(d).

- (g) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports submitted pursuant to 40 CFR 60, Subpart A, or 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d)(5)(i) and (ii), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

The clinker cooler #1 facilities

(131) One (1) clinker cooler #1, identified as EU412.

The clinker cooler #2 facilities

(132) One (1) clinker cooler #2, identified as EU421.

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

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

D.4.2 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

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

- (a) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.
- (b) Visible emissions shall be limited to ten percent (10%) opacity.

D.4.3 Determination of Nonapplicability [40 CFR 60, Subparts A and F]

The clinker cooler #1 is 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 it was constructed prior to the applicability date of August 17, 1971 and has not been modified since the applicability date.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and its emission control devices.

Compliance Determination Requirements

D.4.5 NESHAP Testing Requirements [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11] [326 IAC 2-7-6(1),(6)] [326 IAC 2-1-3(i)(8)]

No later than 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM and opacity limits established in Condition D.4.2 by conducting performance tests in accordance with 40 CFR 63.1349, Methods 5 and 9 of 40 CFR Part 60, Appendix A, and Section C- Performance Testing. These tests shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration.

D.4.6 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 60, Subpart F] [326 IAC 2-7-6(1),(6)]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, and 40 CFR Part 63, Subpart LLL, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers. The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and shall demonstrate continuous compliance with Section C - Opacity, and Condition D.4.2(b).

D.4.7 Particulate Control [326 IAC 2-7-6(6)]

In order to comply with Condition D.4.2, each baghouse for particulate control shall be in operation and control emissions from its associated clinker cooler at all times when its associated clinker cooler is in operation.

D.4.8 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for the clinker coolers. The plan shall include the procedures for proper operation and maintenance of the clinker coolers and associated air pollution control device(s) in order to meet the emissions limit in Condition D.4.2. Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.
- (b) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition D.4.6 shall be used to monitor opacity emissions in accordance with the NESHAP and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A and according to 40 CFR 60, Appendix B, PS-1.

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

D.4.9 Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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 at least once every six (6) months.

D.4.10 Visible Emissions Notations

- (a) Whenever a COMS is malfunctioning or down for maintenance, or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, and the process is operating,
 - (1) 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.

- (A) 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.
 - (B) 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.
 - (C) Method 9 readings may be discontinued once a COM is online.
 - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (b) 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 63, Subpart EEE.

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

D.4.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.4.5 and D.4.6, the Permittee shall maintain records in accordance with (1) and (2) below.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
- (b) To document compliance with Condition D.4.10, whenever Method 9 opacity readings are required, the Permittee shall maintain records of the readings.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain records of the pressure drop once per day during normal operation when venting to the atmosphere:
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).

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

D.4.14 Reporting Requirements

- (a) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7, from the continuous monitoring system shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The excess opacity summary shall also be submitted in accordance with 40 CFR 63.1354(8).
- (b) The Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.1354(8) and 40 CFR 63, Subpart A.
- (c) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a). If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.4.8 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX)

transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

- (e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports submitted pursuant to 40 CFR 60, Subpart A, or 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

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

Pursuant to 40 CFR 63.10(d)(5)(i) and (ii), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activity

Degreasing operations

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

(The information describing the 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 Volatile Organic Compounds (VOC)

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

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

D.5.2 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser facility 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 (38OC) (one hundred degrees Fahrenheit (100OF)));
 - (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 (38OC) (one hundred degrees Fahrenheit (100OF)),

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 (38OC) (one hundred degrees Fahrenheit (100OF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9OC) (one hundred twenty degrees Fahrenheit (120OF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for a cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.5.3 Determinations of Nonapplicability [40 CFR 63.460 (Subpart T)] [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the parts washers specifically listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 20-1, 40 CFR 63.460 (Subpart T) because they do not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.
- (b) The parts washers at this source 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 not considered affected facilities under this rule.

- (c) The parts washers at this source are not 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.

SECTION D.6 FACILITY OPERATION CONDITIONS

| Facility Description [326 IAC 2-7-5(15)] | Insignificant Activity |
|--|------------------------|
| Hazardous Waste fuel facilities | |
| (a) Waste Management Units | |
| (1) Ten (10) hazardous waste-derived fuel storage tanks, installed in 1987 and 1994, with capacities ranging from 22,000-39,000 gallons. All tanks are connected to an integrated emission control system. | |
| (2) Carbon Steel Piping System | |
| (3) Tank Rail Cars and Trucks | |
| (b) Equipment components | |
| (1) Valves | |
| (2) Pumps | |
| (3) AWFCO Valves | |
| (c) Caps (hose end covers) | |
| (d) Flanges | |
| (e) Manways | |
| (f) Flame Arrestors | |
| (g) Filter Pots | |
| (h) Micro-motion Flow Meters | |
| (i) Level Transmitters | |
| (j) Pressure Indicators | |
| (k) Pressure Transmitters | |
| (l) Emergency Conservation Vent | |
| (m) Carbon Canister VOC Monitor | |
| (n) Tank Emergency Relief Ports | |
| (o) High Level Probes | |
| (p) Activated Carbon Canister System | |

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

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart DD, Table 2.

D.6.2 General Provisions Relating to NESHAP [326 IAC 14-1][40 CFR Part 61, Subpart A]

The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 61, Subpart FF and 40 CFR Part 61, Subpart V.

D.6.3 Off-site Waste and Recovery Operations NESHAP [326 IAC 20-23-1] [40 CFR Part 63, Subpart DD] [40 CFR 61, Subpart FF]

These facilities are subject to 40 CFR Part 63, Subpart DD, which is incorporated by reference as 326 IAC 20-23-1, with a compliance date of February 1, 2000.

- (a) Pursuant to 40 CFR 63.680(b)(2)(vi), off-site materials that meet the exemption criteria and are managed at the Permittee's facility in units (tanks, containers (tank rail cars and

trucks), and transfer systems (piping system)), are exempt from the requirements of controlling air emissions in accordance with 40 CFR 63.683 through 63.689.

- (b) Pursuant to 40 CFR 63.683(b)(1)(i), the Permittee shall control the air emissions from each affected off-site material management unit (tanks, containers (tank rail cars and trucks), and transfer systems (piping system)) in accordance with the provisions listed below:
 - (1) Pursuant to 40 CFR 63.683(b)(2)(i), if the off-site material management units, identified as (a) in the description box in this Section, are subject to 40 CFR 61, Subpart FF and the Permittee is controlling the HAPs listed in 40 CFR Part 63, Subpart DD, Table 1 that are emitted from the unit in compliance with the provisions specified in 40 CFR Part 61, Subpart FF, the off-site material management units are exempt from the requirements of controlling air emissions in accordance with 40 CFR 63.685 through 63.689.
 - (2) Pursuant to 40 CFR 63.689(c)(2) and 40 CFR 63.683(b)(1)(i), the Permittee shall control air emissions by operating a transfer system, identified as (a)(3) in the description box in this section, that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).
- (c) Pursuant to 40 CFR 63.683(d), the Permittee shall control equipment leaks from each equipment component, identified as (b) in the description box in this section, that is part of the affected source specified in 40 CFR 63.680(c)(3) by implementing leak detection and control measures in accordance with the standards specified in 40 CFR 63.691(b) and condition D.6.4 and D.6.5.

D.6.4 National Emission Standard for Equipment Leaks (Fugitive Emission Sources)[326 IAC 14-8-1] [40 CFR 61, Subpart V] [40 CFR 63, Subpart DD]

Pursuant to 40 CFR 63.683(d) and 40 CFR 63.691(b)(1), the Permittee shall control the HAPs emitted from equipment leaks in accordance with 40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources), Sections 61.242 through 61.247. The provisions apply to each equipment component that is part of the affected source, including components related to hazardous waste fuel facilities, that meet the criteria specified in 40 CFR 63.680(c)(3).

- (a) Pursuant to 40 CFR 61.242-1(d), each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
- (b) Pursuant to 40 CFR 61.242-4 (Standards: Pressure relief devices in gas/vapor service), the standards listed below apply to pressure relief devices in gas/vapor service:
 - (1) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).
 - (2) The following requirements apply regarding pressure releases:
 - (A) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument

reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10 and Condition D.6.5(e); and,

- (B) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored in accordance with condition D.6.5(b).
- (3) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 61.242-11 and paragraph (f) of this condition is exempt from the requirements of paragraphs (b)(1) and (2) of this condition.
- (c) Pursuant to 40 CFR 61.242-5 (Standards: Sampling connecting systems), the standards listed below apply to sampling connecting systems:
 - (1) Each sampling connection system shall be equipped with a closed-purge system, closed-loop system, or closed vent system.
 - (2) Each closed-purge system, closed-loop system, or closed-vent system as required in paragraph (c)(1) shall comply with one of the following requirements:
 - (A) Return the purged process fluid directly to the process line; or
 - (B) Collect and recycle the purged process fluid; or
 - (C) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with 40 CFR 61.242-11; or
 - (D) Collect, store and transport the following purged process fluid to any of the systems or facilities listed in 40 CFR 61.242-5(b)(4)(i) through (iii).
- (d) Pursuant to 40 CFR 61.242-6 (Standards: Open-ended valves or lines), the standards listed below apply to open-ended valves or lines:
 - (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraph (d)(4) of this condition.
 - (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
 - (3) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
 - (4) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (d)(1) of this condition at all other times.
- (e) Pursuant to 40 CFR 61.242-9 (Standards: Product accumulator vessels), each product accumulator vessel shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel to the activated carbon canister system.
- (f) Pursuant to 40 CFR 61.242-11 (Standards: Closed-vent systems and control devices), the

Permittee shall comply with the provisions of this paragraph for the closed-vent system and activated carbon canister system:

- (1) The activated carbon canister system shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.
- (2) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified in 40 CFR 61.245(c).
- (3) The closed-vent system and activated carbon canister system shall be operated at all times when emissions may be vented to them.

D.6.5 Monitoring Procedures for Equipment Leaks [326 IAC 2-7-6(1)] [40 CFR 61, Subpart V]
[40 CFR 63, Subpart DD]

Pursuant to 40 CFR 61, Subpart V, the Permittee must conduct monitoring in accordance with the paragraphs listed below to comply with leak detection requirements:

- (a) Pursuant to 40 CFR 61.242-2, the following standards apply to pumps:
 - (1) Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as specified in paragraphs (a)(1)(A) or (a)(1)(B) of this condition.
 - (A) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from Condition D.6.5 provided that the requirements of 40 CFR 61.242-2(d)(1) through (d)(6) are met, as applicable.
 - (B) Each pump that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from Condition D.6.5 provided that the requirements of 40 CFR 61.242-2(e)(1) through (e)(3) are met, as applicable.
 - (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - (3) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (4) If there are indications of liquids dripping from the pump seal, a leak is detected.
 - (5) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after each leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (b) Pursuant to 40 CFR 61.242-4(b)(2), no later than 5 calendar days after a pressure release, the pressure relief device in gas/vapor service shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than

500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

- (c) Pursuant to 40 CFR 61.242-7, the standards listed below apply to valves:
- (1) Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b).
 - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (3) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
 - (4) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
 - (5) When a leak is detected it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (7) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (A) Tightening of bonnet bolts;
 - (B) Replacement of bonnet bolts;
 - (C) Tightening of packing gland nuts; and,
 - (D) Injection of lubricant into lubricated packing.
- (d) Pursuant to 40 CFR 61.242-8, pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
- (1) Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as specified in paragraphs (a)(1)(A) or (a)(1)(B) of this condition.
 - (A) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from Condition D.6.5 provided that the requirements of 40 CFR 61.242-2(d)(1) through (d)(6) are met, as applicable.
 - (B) Each pump that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from Condition D.6.5 provided that the requirements of 40 CFR 61.242-2(e)(1) through (e)(3) are met, as applicable.

- (2) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (3) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (4) First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e) and paragraph (c)(7) of this condition.
- (e) Pursuant to 40 CFR 61.242-10 (Standards: Delay of Repair), the standards listed below apply to delay of repair of equipment:
- (1) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
 - (2) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process that does not remain in VHAP service.
 - (3) Delay of repair for valves will be allowed if:
 - (A) The Permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and,
 - (B) When repair procedures are effected, the purged material is collected and destroyed or recovered in the a control device complying with 40 CFR 61.242-11.
 - (4) Delay of repair for pumps will be allowed if:
 - (A) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
 - (B) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
 - (5) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- (f) Pursuant to 40 CFR 61.242-11(e), the Permittee shall monitor the activated carbon canister system to ensure that it is operated and maintained in conformance with its design.
- (g) Pursuant to 40 CFR 61.242-11(f), the monitoring requirements listed below apply to the closed-vent system.
- (1) Closed-vent systems shall be monitored to determine compliance with 40 CFR 61.242-11 initially in accordance with 40 CFR 61.245(b), annually, and at other

times requested by the US EPA or IDEM, OAQ.

- (2) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected except as provided in (g)(3)(A) of this condition.
- (3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

D.6.6 National Emission Standard for Benzene Waste Operations [40 CFR Part 61, Subpart FF]

Pursuant to 40 CFR 61.342(b), the Permittee shall manage each waste stream that contains benzene meeting the criteria specified in 40 CFR 61.340(b) in accordance with 40 CFR 61, Subpart FF - National Emissions Standard for Benzene Waste Operations, paragraphs 61.342(c) through (h).

- (a) Pursuant to 40 CFR 61.342(c)(1)(ii), the Permittee shall control air emissions from each tank in accordance with the applicable standards specified in 40 CFR 61.343(a). Pursuant to 40 CFR 61.343(a)(1), each tank shall be covered by a fixed roof and vented through a closed-vent system that routes all organic vapors vented from the tank to an activated carbon canister system in accordance with items (1) through (4) below.
 - (1) The cover and all openings shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, in accordance with 40 CFR 61.355(h) and condition D.6.12(c).
 - (2) Each opening shall be maintained in a closed, sealed position at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
 - (3) Condition D.6.6(a)(2) does not apply if the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure and the opening meets the following conditions:
 - (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard,
 - (B) The opening is designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, in accordance with 40 CFR 61.355(h) and condition D.6.12(c), and
 - (C) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.
 - (4) The closed-vent system and activated carbon canister system shall be designed to operate in accordance with 40 CFR 61.349 and condition D.6.7.
- (b) Pursuant to 40 CFR 61.342(c)(1)(ii), the Permittee shall control air emissions from each container in accordance with the applicable standards specified in 40 CFR 61.345.
 - (1) The Permittee shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

- (A) The cover and all openings shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, in accordance with 40 CFR 61.355(h) and condition D.6.12(c).
 - (B) Each opening shall be maintained in a closed, sealed position when waste is in the container, except when it is necessary to use the opening for waste loading, removal, inspection, or sampling, except as provided in D.6.6(b)(4).
- (2) When transferring waste into a container by pumping, the Permittee shall perform the transfer using a submerged fill pipe as specified in 40 CFR 61.345(a)(2).
- (3) Treatment of waste in a container as specified in 40 CFR 61.345(a)(3) shall route all organic vapors vented from the container through a closed-vent system to the activated carbon canister system.
- (A) The cover and all openings shall be designed to operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, in accordance with 40 CFR 61.355(h) and condition D.6.12(c).
 - (B) The closed-vent system and activated carbon canister system shall be designed to operate in accordance with 40 CFR 61.349 and condition D.6.7.
- (4) Condition D.6.8(b)(1)(B) and D.6.8(b)(2) do not apply if the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure and the opening meets the following conditions:
- (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard,
 - (B) The opening is designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, in accordance with 40 CFR 61.355(h) and condition D.6.12(c), and
 - (C) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

D.6.7 Standards: Closed-Vent Systems and Activated Carbon Canister System
[40 CFR Part 61, Subpart FF] [40 CFR 61.349]

The provisions of 40 CFR 61.349 apply to the closed-vent system and the activated carbon canister system used to control air emissions from the tanks and containers with conditions for which 40 CFR 61.343(a) and 61.345(a)(3) applies. The Permittee shall meet the requirements specified in items (a) and (b) below:

- (a) Pursuant to 40 CFR 61.349(a), the Permittee shall meet the following requirements for the closed-vent system and activated carbon canister system used to comply with 40 CFR 61.343 and 61.345:
 - (1) The Permittee shall properly design, install, operate, and maintain the closed-vent system in accordance with the following requirements:

- (A) The closed-vent system shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background in accordance with 40 CFR 61.355(h) and condition D.6.12(c).
 - (B) Vent systems that contain a bypass line shall install, maintain, and operate according to manufacturer's specifications a flow indicator as specified in 61.349(a)(1)(ii).
 - (C) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 - (D) Devices use by the closed-vent system that vent directly to the atmosphere shall remain in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.
- (2) Pursuant to 40 CFR 61.349(a)(2)(ii), the Permittee shall maintain an activated carbon canister system designed and operated to control the organic emissions vented to it with an efficiency of 95 weight percent or greater.
- (b) Pursuant to 40 CFR 61.349(b), the closed-vent system and activated carbon canister shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.
 - (c) Pursuant to 40 CFR 61.349(a)(2), a control device shall be designed and operated in accordance with 40 CFR 61.349(a)(2)(i) through (a)(2)(iv), as applicable.

D.6.8 Monitoring Procedures for Tanks [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

The Permittee shall inspect and repair defects for each tank in which the waste stream is placed as follows:

- (a) Pursuant to 40 CFR 61.343(c), the Permittee shall inspect each fixed-roof, seal, access door, and all other openings by visual inspection initially and quarterly thereafter to ensure no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.
- (b) The Permittee shall repair all detected defects, in accordance with 40 CFR 61.343(d) and 40 CFR 61.350, as follows:
 - (1) The Permittee shall make a first effort to repair broken seals or gaskets or other problems identified as soon as practicable, but not later than 45 calendar days after identification.
 - (2) Repair of defects may be delayed beyond 45 calendar days if completion of the repair is technically impossible without a complete or partial facility or unit shutdown. Repair of such equipment shall occur before the end of the next facility or unit shutdown.

D.6.9 Monitoring Procedures for Containers [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 61.345(b), the Permittee shall visually inspect each cover and all openings initially and quarterly thereafter to ensure that they are closed and gasketed properly.
- (b) The Permittee shall repair all detected defects, in accordance with 40 CFR 61.345(c) and 40 CFR 61.350, as follows:
 - (1) The Permittee shall make a first effort to repair broken seals or gaskets or other problems identified as soon as practicable, but not later than 15 calendar days after identification.
 - (2) Repair of defects may be delayed beyond 15 calendar days if completion of the repair is technically impossible without a complete or partial facility or unit shutdown. Repair of such equipment shall occur before the end of the next facility or unit shutdown.

D.6.10 Monitoring Procedures for Activated Carbon Canister System and Closed-Vent System [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 61.349(h) and 40 CFR 61.354(d), the Permittee shall ensure that the activated carbon canister system operates properly in accordance with the performance specifications in D.6.7 by monitoring the activated carbon canister system in accordance with all of the following requirements:
 - (1) The Permittee shall install and operate a device to monitor the concentration level of the organic compounds in the exhaust vent stream from the activated carbon canister system on a regular schedule.
 - (2) Existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated.
 - (3) The device shall be monitored on a daily basis.
 - (4) The monitoring system shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications.
- (b) If a bypass line is installed, the Permittee shall visually inspect the bypass line valve at least once every month to ensure that the valve is maintained in the closed position and readings from the flow monitoring device at least once each operating day as specified in 40 CFR 61.354(f) and condition D.6.7.
- (c) The Permittee using a system for emission control that is maintained at a pressure less than atmospheric pressure shall monitor the pressure with a device equipped with a continuous recorder as specified in 40 CFR 61.354(g).
- (d) The closed-vent system and the activated carbon canister system shall be visually inspected quarterly in accordance with 40 CFR 61.349(f).
- (e) The Permittee shall repair all detected defects, in accordance with 40 CFR 61.349(g) and 40 CFR 61.350, as follows:
 - (1) The Permittee shall make a first effort to repair the closed-vent system and activated carbon canister system as soon as practicable, but no later than 5 calendar days after detection and repair shall be completed no later than 15

calendar days after detection.

- (2) Repair of defects may be delayed beyond 15 calendar days if completion of the repair is technically impossible without a complete or partial facility or unit shutdown. Repair of such equipment shall occur before the end of the next facility or unit shutdown.

D.6.11 Startup, Shutdown, and Malfunction Plan [40 CFR 63.6(e)(3) General Provisions]

Pursuant to 40 CFR 63, Subpart DD, the Permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63, Subpart DD. As required under 40 CFR 63.8(c)(1)(i) (General Provisions), the plan shall identify all routine or otherwise predictable continuous monitoring system (CMS) malfunctions. The plan shall be incorporated by reference into the source's Part 70 permit.

- (a) The purpose of the SSM plan is to:
 - (1) Ensure that, at all times, the Permittee operates and maintains each facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the rule;
 - (2) Ensure that the Permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of HAP; and
 - (3) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
- (b) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain each facility (including associated air pollution control equipment) in accordance with the procedures specified in the SSM plan developed under this condition.
- (c) The Permittee shall keep the written SSM plan on record after it is developed to be made available for inspection, upon request, by IDEM, OAQ for the life of the facility or until the facility is no longer subject to this rule. In addition, if the SSM plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the SSM plan on record, to be made available for inspection, upon request, by IDEM, OAQ, for a period of 5 years after each revision to the plan. Revisions to the SSM plan are automatically incorporated by reference and do not require a permit revision.
- (d) To satisfy the requirements of this condition, the Permittee may use the facility's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this condition and are made available for inspection when requested by IDEM, OAQ.
- (e) IDEM, OAQ shall determine whether acceptable operation and maintenance procedures are being used, based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the SSM plan required in this condition), review of operation and maintenance records, and inspection of the facility.

Based on the results of such determination, IDEM, OAQ may require that the Permittee make changes to the SSM plan for the source. IDEM, OAQ may require reasonable revisions to a SSM plan, if IDEM, OAQ finds that the plan:

- (1) Does not address a startup, shutdown, or malfunction event that has occurred;
 - (2) Fails to provide for the operation of the facility (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards; or
 - (3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
- (f) If the SSM plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the SSM plan at the time the Permittee developed the plan, the Permittee shall revise the SSM plan within forty-five (45) days after the event to include detailed procedures for operating and maintaining the facility during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment.

Compliance Determination Requirements

D.6.12 Leak Detection Testing Requirements [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

- (a) When equipment is tested for compliance with or monitored for no detectable emissions in accordance with the standard for pressure relief devices in 40 CFR 61.242-4 and closed-vent system in 40 CFR 61.242-11, the Permittee shall comply with the requirements in 40 CFR 61.245(c).
- (b) Pursuant to 40 CFR 61.242-1(b), compliance with 40 CFR 61, Subpart V, will be determined by a review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.
- (c) Pursuant to 40 CFR 61, Subpart FF, the Permittee must demonstrate no detectable emissions from the cover and all openings in waste management units by performing a test in accordance with 40 CFR 61.355(h) at least once per year.

D.6.13 Activated Carbon Canister System Compliance Determination Requirements [326 IAC 2-7-6(1)] [40 CFR 61, Subpart FF]

Pursuant to 40 CFR 61.349(c)(1), the Permittee shall demonstrate that the activated carbon canister system achieves the conditions specified in 40 CFR 61.349(a)(2)(ii) and D.6.7(a)(2) by performing a design analysis that includes the items specified in 61.356(f)(2) and as follows:

- (a) Pursuant to 40 CFR 61.356(f)(2)(i), the design analysis shall include, but is not limited to, specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the Permittee, or the control device manufacturer or vendor that describe the activated carbon canister system design based on acceptable engineering texts; and
- (b) The design analysis shall address the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and the total carbon working capacity of the control device and source operating schedule.

- (c) Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 63]

D.6.14 General Record Keeping Requirements [40 CFR 63, Subpart A] [40 CFR 63, Subpart DD] [40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 63.696(a), the Permittee shall comply with the record keeping requirements in 40 CFR 63.10, under 40 CFR 63 Subpart A (General Provisions), that are applicable to 40 CFR 63, Subpart DD, as specified in Table 2 of Subpart DD.
- (b) Pursuant to 40 CFR 63.6(e)(3), to document compliance with the SSM Plan requirement, the Permittee shall comply with the following record keeping requirements:
 - (1) When actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the SSM Plan, the Permittee shall keep records for that event in accordance with 40 CFR 63.6(e)(3)(iii).
 - (2) If an action taken by the Permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the SSM Plan, the Permittee shall record the actions taken for that event in accordance with 40 CFR 63.6(e)(3)(iv).
- (c) Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF.
- (c) Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF, the Permittee shall keep records that include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
- (d) Pursuant to 40 CFR 61.356(a), the Permittee shall maintain each record in accordance with Section C - General Record Keeping Requirements.

D.6.15 Record Keeping Requirements for Equipment Leaks [40 CFR 63, Subpart DD] [40 CFR 61, Subpart V]

Pursuant to 40 CFR 61.246, the Permittee shall comply with the following record keeping requirements:

- (a) The Permittee may comply with the record keeping requirements for the process units in one record keeping system if the system identifies each record by each process unit.
- (b) When each leak is detected as specified in 40 CFR 61, Sections 242-2, 242-7, and 242-8 and in condition D.6.5, the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

- (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and condition D.6.5 and no leak has been detected during those 2 months.
 - (3) The identification on equipment, except on a valve, may be removed after it has been repaired.
- (c) When each leak is detected as specified in 40 CFR 61, Sections 242-2, 242-7, and 242-8 and in condition D.6.5, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
- (1) The instrument and operator identification numbers and the equipment identification number;
 - (2) The date the leak was detected and the dates of each attempt to repair the leak;
 - (3) Repair methods applied in each attempt to repair the leak;
 - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;
 - (6) The signature of the Permittee (or designate) whose decision it was that the repair could not be effected without a process shutdown;
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and,
 - (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for the closed-vent system and activated carbon canister system shall be recorded and kept in a readily accessible location:
- (1) Detailed schematics, design specifications, and piping and instrumentation diagrams;
 - (2) The dates and descriptions of any changes in the design specifications;
 - (3) A description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e) and condition D.6.5, to ensure that the activated carbon canister system is operated and maintained in conformance with its design and an explanation of why that parameter (or parameters) was selected for the monitoring;
 - (4) Periods when the closed-vent system and activated carbon canister system are not operated as designed; and,

- (5) Dates of startups and shutdowns of the closed-vent system and activated carbon canister system.
- (e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart V;
 - (2) A list of identification numbers for equipment that the Permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background. The designation of this equipment for no detectable emissions shall be signed by the Permittee;
 - (3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a) and condition D.6.4(b); and,
 - (4) The following information for each compliance test required in 40 CFR 61.242-4 and condition D.6.4(b):
 - (A) The dates of each compliance test required in 40 CFR 61.242-4 and condition D.6.4(b);
 - (B) The background level measured during each compliance test; and,
 - (C) The maximum instrument reading measured at the equipment during each compliance test.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.16 Record Keeping Requirements for Tanks and Containers [40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 61.356(d), the Permittee shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment.
- (b) Pursuant to 40 CFR 61.356(g), the Permittee shall maintain the following records:
 - (1) For tanks using a fixed roof to comply with the tank control requirements specified in 40 CFR 61.343(a) and condition D.6.6(a), a record of each visual inspection required by 40 CFR 61.343(c) and condition D.6.8 that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions.
 - (2) For containers using a cover to comply with the container control requirements specified in 40 CFR 61.345(a) and condition D.6.6(b), a record of each visual inspection required by 40 CFR 61.345(b) and condition D.6.9 that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions.
 - (3) Each record required by paragraphs (1) and (2) shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

- (c) The Permittee shall maintain a record of each test of no detectable emissions required by 40 CFR 61.343(a), 40 CFR 61.345(a), condition D.6.6(a), and condition D.6.6(b) as specified in 40 CFR 61.356(h).
- (d) Pursuant to 40 CFR 61.356(m), if the cover and closed-vent system operate such that the tank or container is maintained at a pressure less than atmospheric pressure as allowed in condition D.6.6 then the Permittee shall maintain records of all periods during which the pressure in the unit is operated at a pressure greater than atmospheric pressure.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.17 Record Keeping Requirements for Activated Carbon Canister System and Closed-Vent System
[40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 61.356(f), the Permittee shall maintain the following records for the closed-vent and activated carbon canister system for the life of the system:
 - (1) A statement, signed and dated by the Permittee, certifying that the closed-vent system and activated carbon canister system is designed to operate at the documented performance level when the waste management unit vented to the activated carbon canister system is or would be operating at the highest load or capacity expected to occur.
 - (2) For the activated carbon canister system, records of the design analysis required in condition D.6.13.
- (b) The Permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 and 61.345 that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions as specified in 40 CFR 61.356(g).
- (c) The Permittee shall maintain a record of each test of no detectable emissions required by 40 CFR 61.349(a) and condition D.6.7(a) as specified in 40 CFR 61.356(h).
- (d) Pursuant to 40 CFR 61.356(j), the Permittee shall maintain documentation that includes the following information regarding the control device operation:
 - (1) Dates of startup and shutdown of the closed-vent system and activated carbon canister system.
 - (2) A description of the operating parameters to be monitored as specified in 40 CFR 61.356 (j)(2). This documentation shall be kept for the life of the control device.
 - (3) Pursuant to 40 CFR 61.356(j)(3), periods when the closed-vent system and activated carbon canister system are not operated as designed including all periods and the duration when any valve car-seal or closure mechanism is broken or the by-pass line valve has changed and when the flow monitoring devices indicate that vapors are not routed to the control device as required.
 - (4) Records from the monitoring device of the concentration of organics in the activated carbon canister system outlet gas stream as specified in 40 CFR 61.356(j)(9).
 - (5) Records of the dates and times when the activated carbon canister system is

monitored, when breakthrough is measured, and the date and time the existing carbon is replaced with fresh carbon as specified in 40 CFR 61.356(j)(10).

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

D.6.18 Reporting Requirements [40 CFR 63, Subpart A] [40 CFR 63, Subpart DD]
[40 CFR 61, Subpart V]

- (a) Pursuant to 40 CFR 63.697(a), the Permittee shall submit reports to the US EPA and IDEM, OAQ in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63, Subpart DD.
- (b) Pursuant to 40 CFR 63.697(b), the Permittee shall submit to the US EPA and IDEM, OAQ startup, shutdown, and malfunction reports specified in 40 CFR 63.10(d)(5). If actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy.
- (c) Pursuant to 40 CFR 61.247, the Permittee shall comply with the reporting requirements of this paragraph. A report shall be submitted to the US EPA and IDEM, OAQ semi-annually, that includes the following information:
- (1) Process unit identification;
 - (2) For each month during the semi-annual reporting period:
 - (A) Number of valves for which leaks were detected as described in 40 CFR 61.242-7(b) and condition D.6.5(c)(2);
 - (B) Number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d) and condition D.6.5(c)(5);
 - (C) Number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and condition D.6.5(a)(3) and (4);
 - (D) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and condition D.6.5(a)(5) and (6); and,
 - (E) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
 - (2) Dates of process unit shutdowns which occurred within the semi-annual reporting period;
 - (3) Revisions to items reported according to the initial report required by 40 CFR 61.247(a)(1) if changes have occurred since the initial report or subsequent revisions to the initial report; and,
 - (5) The results of all performance tests and monitoring to determine compliance with no detectable emissions conducted within the semi-annual reporting period.

D.6.19 Reporting Requirements [40 CFR 61, Subpart FF]

- (a) Pursuant to 40 CFR 61.357, the Permittee shall submit to the US EPA and IDEM, OAQ an annual report containing the following information:
- (1) Information updating the report originally submitted pursuant to 40 CFR 61.357 (a)(1) through (a)(3), or a statement that the information has not changed from the following year as specified in 40 CFR 61.357(d)(2).
 - (2) Summary of all inspections required by condition D.6.8 and D.6.9 during which detectable were measure or a problem that could result in benzene emissions was identified, including information about the repairs or corrective action taken as specified in 40 CFR 61.357(d)(8).
- (b) Pursuant to 40 CFR 61.357, the Permittee shall submit to the US EPA and IDEM, OAQ a quarterly report containing the following information:
- (1) A certification that all the required inspections have been carried out as required by condition D.6.8 and D.6.9 as specified in 40 CFR 61.357(d)(6).
 - (2) Each 3-hour period of operation during which the average concentration of organics in the exhaust gases from the activated carbon canister system is more than 20 percent greater than the design concentration level of organics in the exhaust gas as specified in 40 CFR 61.357(d)(7)(iv)(D).
 - (3) Each occurrence when the carbon in the carbon canister is not replaced at the predetermined interval specified in 61.354(c) as specified in 40 CFR 61.357(d)(7)(iv)(I).
 - (4) Identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure if the cover and closed-vent system operate in this manner as specified in 40 CFR 61.357(d)(7)(v).

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: ESSROC Cement Corporation
Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Part 70 Permit No.: T017-6033-00005

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: ESSROC Cement Corporation
Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Part 70 Permit No.: T017-6033-00005

This form consists of 2 pages

Page 1 of 2

| |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |
|--|

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

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

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

Page 2 of 2

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

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

Part 70 Quarterly Report for Use When Combusting Only Coal

Source Name: ESSROC Cement Corporation
Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Part 70 Permit No.: T017-6033-00005
Facility: Kilns #1 and 2
Parameter: Sulfur Dioxide (SO₂) from the combustion of coal
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:

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report for Use When Combusting Only Fuel Oil

Source Name: ESSROC Cement Corporation
Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Part 70 Permit No.: T017-6033-00005
Facility: Kilns #1 and 2
Parameter: Sulfur Dioxide (SO₂) 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:

Attach a signed certification to complete this report.

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

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

Source Name: ESSROC Cement Corporation
 Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Part 70 Permit No.: T017-6033-00005
 Facility: Kilns #1 and 2
 Parameter: Sulfur Dioxide (SO₂) 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) | | Fuel Consumption | | Equivalent Sulfur Dioxide Emissions (lbs/MMBtu) | | |
|-------|------------------------------------|----------|---|----------|------------------|--------------------|---|----------|-------|
| | Coal | Fuel Oil | Coal | Fuel Oil | Coal (tons) | Fuel Oil (gallons) | Coal | Fuel Oil | Total |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report for CKD Throughput EU902 to EU905

Source Name: ESSROC Cement Corporation
 Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Part 70 Permit No.: T017-6033-00005
 Facility: Silo 15 (EU905) and CKD2FM recycling storage tank system (EU902)
 CKD2FM #1 FM (EU903) and CKD2FM #2 FM (EU904)
 Parameter: Cement Kiln Dust (CKD) throughput
 Limit: 65,000 tons per twelve (12) consecutive month period for EU905 and EU902
 combined.
 65,000 tons per twelve (12) consecutive month period for EU905 and EU902
 combined.

FACILITY: _____ YEAR: _____

| Monthly CKD throughput (tons) | | | | | |
|---|--------------------|----------------|--|--------------------|----------------|
| Silo 15 (EU905) and CKD2FM recycling storage tank system (EU902) (combined) | | | CKD2FM #1 FM (EU903) and CKD2FM #2 FM (EU904) (Combined) | | |
| This Month | Previous 11 Months | 12 Month Total | This Month | Previous 11 Months | 12 Month Total |
| | | | | | |
| | | | | | |
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- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on:

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

Attach a signed certification to complete this report.

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

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

Source Name: ESSROC Cement Corporation
Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
Part 70 Permit No.: T017-6033-00005

Months: _____ to _____ Year: _____

| | |
|--|-------------------------------|
| This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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". | |
| <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: | |

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|--|-------------------------------|
| 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:

Attach a signed certification to complete this report.

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

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

| |
|--|
| Source Description and Location |
|--|

| | |
|---|--|
| Source Name: | ESSROC Cement Corporation |
| Source Location: | State Road 25 South, 3084 West County Road 225 South, Logansport, Indiana 46947 |
| County: | Cass |
| SIC Code: | 3241 |
| Operation Permit No.: | T 017-6033-00005 |
| Operation Permit Issuance Date: | December 29, 2003 |
| Minor Source Modification No.: | 017-22319-00005 |
| Significant Permit Modification No.: | 017-22539-00005 |
| Permit Reviewer: | Jenny Acker |

| |
|---------------------------|
| Existing Approvals |
|---------------------------|

The source was issued Part 70 Operating Permit No. 017-6033-00005 on December 29, 2003.

| |
|---------------------------------|
| County Attainment Status |
|---------------------------------|

The source is located in Cass County.

| Pollutant | Status |
|-----------------|------------|
| PM10 | Attainment |
| PM2.5 | Attainment |
| SO ₂ | Attainment |
| NO ₂ | Attainment |
| 1-hour Ozone | Attainment |
| 8-hour Ozone | Attainment |
| CO | Attainment |
| Lead | Attainment |

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Cass 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) Cass County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2

for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

- (c) Cass County has been classified as attainment or unclassifiable for PM10, SO₂, NO₂, CO, Lead and Ozone under the 1 and 8 hour standards. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) 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 2-2-1(gg)(1).
- (e) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

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 (tons/year) |
|------------------|------------------------------|
| PM | Greater than 100 |
| PM10 | Greater than 100 |
| SO ₂ | Greater than 100 |
| VOC | Less than 100 |
| CO | Greater than 100 |
| NO _x | Greater than 100 |

- (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, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon the Technical Support Document (TSD) to the Part 70 Operating Permit No. 017-6033-00005, issued on December 29, 2003.

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

| HAPs | Potential To Emit tons/year) |
|--------------------|-------------------------------------|
| Any One Single HAP | Less than 10 |
| Total HAPs | Greater than 25 |

Note: The emissions for HAPs were determined through use of AP-42 emission factors. The emission factors are based on controlled emissions. Potential emissions may be greater than those stated above. (Part 70 Operating Permit No.: 017-6033-00005)

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are 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).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

| Pollutant | Actual Emissions (tons/year) |
|-----------------|------------------------------|
| PM | No Data |
| PM10 | 298 |
| SO ₂ | 1543 |
| VOC | 63 |
| CO | 1758 |
| NO _x | 1392 |
| HAP | No Data |

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by ESSROC Cement Corporation on November 30, 2005, relating to the construction of the CKD-To-Finish Mill (CKD2FM) Project. This project will allow the source to divert cement kiln dust (CKD), which is currently being disposed, to finish mill #1 circuit and finish mill #2 circuit, where the CKD can be recycled back into the cement manufacturing process.

CKD stored in the existing waste CKD tank (EU406) is currently loaded onto trucks for transfer to an on-site landfill. The CKD2FM surge system will be a modification to the waste CKD tank and will provide the option of pneumatically transferring the CKD to one of two storage tanks. The primary destination of the CKD will be the new CKD2FM recycling storage tank system (EU902). The CKD will then be transferred via the new CKD2FM #1 FM (EU903) to the existing finish mill #1 circuit (EU602) and via the new CKD2FM #2 FM (EU904) to the existing finish mill #2 circuit (EU605). The project will also allow the transfer of the CKD from the waste CKD tank to silo 15 CKD storage (EU905) where the CKD can be transported to the on-site landfill or sold.

Note: Silo 15 is an existing silo, which was isolated from the main bank of silos and a common baghouse, and will be controlled by an independent baghouse.

The following is a list of the proposed and modified emission units and pollution control devices associated with the CKD2FM project:

- One (1) waste dust tank, constructed in 1962, modified in 2005 with the addition of one (1) CKD2FM surge system, collectively identified as EU406, with emissions controlled by a baghouse, constructed in 2005, identified as baghouse 142 and CE901, and exhausting to one (1) stack identified as EP901.
- One (1) CKD2FM recycling storage tank system, identified as EU902, constructed in 2005, with particulate emissions controlled by one (1) baghouse, identified as baghouse 143 and CE902, and exhausting to one (1) stack, identified as EP902.
- One (1) CKD2FM #1 FM recycling system, identified as EU903, constructed in 2005.
- One (1) CKDFM #2 FM recycling system, identified as EU904, constructed in 2005.
- One (1) silo, Silo 15, identified as EU905, constructed in 1965, with particulate emissions

controlled by one (1) baghouse, identified as baghouse 144 and CE905, and exhausting to one (1) stack, identified as EP905.

Silo 8 which was part of emission unit EU709 will be moved to emission unit EU711. There are no new emissions associated with this move.

ESSROC Cement Corporation, requested that IDEM, OAQ re-evaluate the compliance determination and monitoring requirements.

Enforcement Issues

IDEM is aware that equipment has been constructed prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Stack Summary

| Stack ID | Operation | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature (°F) |
|-----------------|------------------|----------------------|------------------------|-------------------------|-------------------------|
| CE901/EP901 | EU406 | N/A | N/A | 644 | 150 |
| CE902/EP902 | EU902 | N/A | N/A | 3400 | 150 |
| CE905/EP905 | EU905 | N/A | N/A | 1550 | 150 |

Emission Calculations

See Appendix A of this 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.

| Pollutant | Potential To Emit (tons/year) |
|------------------|--------------------------------------|
| PM | 23.50 |
| PM10 | 14.99 |
| SO ₂ | -- |
| VOC | -- |
| CO | -- |

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| NO _x | -- |

This source modification is subject to 326 IAC 2-7-10.5 (d)(4)(E) for modifications for which the potential to emit is limited to less than twenty-five (25) tons per year of any regulated pollutant other than hazardous air pollutants (HAPS) by limiting the raw material throughput. 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)(1), since every significant change in existing monitoring Part 70 permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions shall be considered significant.

Permit Level Determination – PSD or 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 modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process/Emission Unit | Potential to Emit (tons/year) | | | | | |
|--|-------------------------------|-------|-----------------|-----|-----|-----------------|
| | PM | PM10 | SO ₂ | VOC | CO | NO _x |
| CKD2FM recycling storage tank system (EU902) and Silo 15 (EU905) | 23.40 | 14.95 | -- | -- | -- | -- |
| CKD2FM #1 recycling system (EU903) and CKD2FM #2 recycling system (EU904) | 0.01 | 0.04 | -- | -- | -- | -- |
| Total for Modification | 23.50 | 14.99 | | | | |
| Significant Level or Major Source Threshold | 25 | 15 | 40 | 100 | 100 | 40 |

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year and fifteen (15) tons of PM₁₀ per year, this source has elected to limit the potential to emit of this modification as follows:

- (a) PM and PM10 emissions shall be limited as follows:

| Emission Unit | PM | PM10 |
|--|-----------------------|------------------------|
| CKD2FM recycling storage tank system (EU902) | 0.72 (lb/ton of CKD) | 0.46 (lb/ton of CKD) |
| CKD2FM #1 FM recycling system (EU903) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |

| Emission Unit | PM | PM10 |
|---|--------------------------|---------------------------|
| CKD2FM #2 FM recycling system (EU904) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |
| Silo 15 (EU905) Described in Section D.1 | 0.72 (lb/ton of CKD) | 0.46 (lb/ton of CKD) |

- (b) The Permittee shall limit the throughput of CKD per twelve consecutive month period, with compliance determined at the end of each month, according to the following:

| Emission Unit | CKD Throughput (tons) |
|--|-----------------------|
| Silo 15 (EU905) Described in Section D.1 | 65,000 (combined) |
| CKD2FM recycling storage tank system (EU902) | |
| CKD2FM #1 FM recycling system (EU903) | 65,000 (combined) |
| CKD2FM #2 FM recycling system (EU904) | |

Compliance with the above limits will ensure that total PM and PM10 emissions from Minor Source Modification 017-22319-00005 are less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

Federal Rule Applicability Determination

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

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Portland Cement Manufacturing Industry (40 CFR 63, Subpart LLL), which is incorporated by reference as 326 IAC 20-27. The units subject to this rule include the following

- (a) The following existing emission units are subject to the provision of 40 CFR 63, Subpart LLL immediately upon startup of the CKD2FM project, since the cement kiln dust (CKD) being conveyed and stored by these emission units will be a raw material under 40 CFR 63, Subpart LLL.

Kiln #1 Waste CKD Operations

- (38) five (5) discharge hopper screws, identified as EU402.
- (39) one (1) covered 16" cross screw, identified as EU403.
- (40) One (1) #1 waste dust elevator, identified as EU404.
- (41) One (1) 9" cross screw, identified as EU405.

Kiln #2 Waste CKD Operations

- (46) five (5) discharge hopper screws, identified as EU414.
- (47) 16" covered cross screws, identified as EU415.
- (48) #2 waste dust elevator, identified as EU416.

- (b) The following existing emission units were subject to the provisions of 40 CFR 63, Subpart LLL on June 10, 2002, since the cement kiln dust (CKD) being conveyed and stored by

these emission units is a raw material under 40 CFR 63, Subpart LLL.

Kiln #1 Recycled CKD Operations

- (34) #1 recycled dust elevator, identified as EU408.
- (35) One (1) recycled dust holding tank, identified as EU409.
- (36) One (1) feeder screw and F-K pump, identified as EU410.
- (37) #1 recycled dust scoop/insufflation system, identified as EU411.

Kiln #2 Recycled CKD Operations

- (42) #2 recycled dust elevator, identified as EU417.
- (43) One (1) recycled dust holding tank, identified as EU418.
- (44) One (1) feeder screw and F-K pump, identified as EU419.
- (45) #2 recycled dust scoop system/insufflation system, identified as EU420.

- (c) The new or modified emission units are subject to the provisions of 40 CFR 63, Subpart LLL immediately upon startup of the CKD2FM project.

CKD –To-Finish Mill (CKD2FM) Recycling Operations

- (133) One (1) waste dust tank, and one (1) CKD2FM surge system, collectively identified as EU406.
- (134) One (1) CKD2FM recycling storage tank system, identified as EU902.
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903.
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904.

- (c) Upon startup of the CKD2FM project, silo 15 (EU905) will not be subject to the provision of 40 CFR 63, Subpart LLL (NESHAP for Portland Cement Plants). The CKD stored in silo 15 is destined for disposal or sale and it is not considered a raw material. Furthermore, the chain of applicability stops after the first conveying system transfer point from an affected source when transferring material to a non-affected source. The waste dust tank and surge system (EU902) transfer CKD into a pneumatic conveyance system prior to conveyance into silo 15. Therefore, the transfer of material into silo 15 is not subject to 40 CFR 63, Subpart LLL.

A summary of the applicable requirements is as follows:

- (a) Pursuant to this rule the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply except when otherwise specified in 40 CFR Part 63, Subpart LLL.
- (b) Pursuant to this rule the following conditions shall apply to all the affected facilities:
 - (1) The visible emissions from each facility shall not exceed ten percent (10%) opacity.
 - (2) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the affected facilities before start-up. The plan shall include the following information:
 - (A) Procedures for proper operation and maintenance of these facilities and associated air pollution control device(s).
 - (B) Procedures to be used to periodically monitor the affected facilities, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (i) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60,

Appendix A, Method 22. The test must be conducted while the affected source is in operation.

- (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (iii) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (iv) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

The requirement to conduct Method 22 visible emissions monitoring under this paragraph [40 CFR 63.1350(a)(4)] 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.

For any partially enclosed or unenclosed conveying system transfer point located in a building, the Permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs 40 CFR 63.1350(a)(4)(i) through (iv) for each such conveying system transfer point located within the building, or for the building itself [according to paragraph 40 CFR 63.1350(a)(4)(vii)]. If visible emissions from a building are monitored, the requirements of paragraphs 40 CFR 63.1350(a)(4)(i) through (iv) apply to the monitoring of the building, and the Permittee must also do the following: Test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

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

- (3) To document compliance with the NESHAP, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (A) The operations and maintenance plan shall be submitted to IDEM, OAQ and U.S. EPA before start-up.
 - (B) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results

of performance tests as part of the notification of compliance status.

- (C) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
- (D) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
- (E) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

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 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:

| Emission Unit | Control Device Used | Emission Limitation (Y/N) | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | Major Source Threshold (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|---|---------------------|---------------------------|------------------------------|----------------------------|------------------------------------|----------------------|------------------|
| CKD2FM Recycling Storage Tank System (EU902) - PM | Baghouse | Y | 44.15 | 0.09 | 100 | N | N |
| Silo #15 CKD Storage (EU905) - PM | Baghouse | Y | 34.70 | 0.07 | 100 | N | N |
| CKD2FM #1 Recycling System (EU903) - PM | Baghouse | Y | 0.22 | Neg. | 100 | N | N |
| CKD2FM #2 Recycling System (EU904) - PM | Baghouse | Y | 0.05 | Neg. | 100 | N | N |

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new or modified units as part of this modification permit.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The allowable PM emission rate from the waste CKD disposal operations (EU405 and EU907) shall not exceed 39.96 pounds per hour (total for all units combined) when operating at a combined process weight rate of 30 tons per hour.
- (b) The allowable PM emission rate from the waste dust tank, and CKD2FM surge system (EU406) shall not exceed 39.96 pounds per hour when operating at a process weight rate of 30 tons per hour.
- (c) The allowable PM emission rate from the CKD2FM recycling storage tank system, and CKD2FM #1FM and #2FM shall not exceed 24.03 pounds per hour (total for all units combined) when operating at a process weight rate of 14 tons per hour.

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

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

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

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:

- (a) The baghouses for particulate control shall be in operation and control emissions at all times the associated facilities are in operation.
- (b) No later than 90 days after startup, the Permittee shall demonstrate initial compliance with the limits established in 40 CFR 63.1348 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing for the following emission units:

Kiln #1 Waste CKD Operations

- (38) five (5) discharge hopper screws, identified as EU402.
- (39) one (1) covered 16" cross screw, identified as EU403.
- (40) One (1) #1 waste dust elevator, identified as EU404.
- (41) One (1) 9" cross screw, identified as EU405.

Kiln #2 Waste CKD Operations

- (46) five (5) discharge hopper screws, identified as EU414.
- (47) 16" covered cross screws, identified as EU415.
- (48) #2 waste dust elevator, identified as EU416.

CKD -To-Finish Mill (CKD2FM) Recycling Operations

- (133) One (1) waste dust tank, and one (1) CKD2FM surge system, identified as EU406.
- (134) One (1) CKD2FM recycling storage tank system, identified as EU902.
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903.
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904.

The Compliance Monitoring Requirements applicable to this modification are as follows:

- (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 visible emissions are present. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of visible emissions for that specific process. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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 at least once every six (6) months.

- (c) The Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per day, and of the pressure drop once per day during normal operation when venting to the atmosphere.
- (d) No later than 90 day after start-up, the Permittee shall demonstrate initial compliance with the limits established in Condition D.2.4 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 40 CFR 63.1348 (Standards for Affected Sources) and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 017-6033-00005. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change No. 1:

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Section B – Preventive Maintenance, and has amended the Section B – Emergency Provisions condition as follows:

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) remains the same
- ~~(b)~~ ~~The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~
- ~~(b)~~ **(b)** A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs ~~does~~ not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- ~~(c)~~ **(c)** To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operations and Maintenance (O&M) 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) through (d) remain the same
- (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. IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.**

(f) and (g) remain the same

Change No. 2:

IDEM has clarified the Section B - Operational Flexibility condition as follows:

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

- (a) remains the same
 - (1) remains the same
 - (2) remains the same
 - (3) The changes do not result in emissions which exceed the ~~emissions allowable under limitations provided in~~ this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) remains the same
 - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions ~~trading trades~~ that are subject to 326 IAC 2-7-20(b), (c), or (e). ~~and makes~~ **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), (c)(1), and (e)(2).
- (b) remains the same
- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade **emissions** increases and decreases ~~in emissions in~~ 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) remains the same

Change No. 3:

IDEM has clarified the Section C- Maintenance of Continuous Opacity Monitoring Equipment condition as follows:

C.12 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 ~~continuous opacity monitoring systems~~ **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 ~~continuous opacity monitoring systems~~ **COMS** occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.

Change No. 4:

IDEM realizes that these specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

C.15 ~~Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]~~

- (a) ~~Whenever a condition in this permit requires the measurement of pressure drop, voltage, current, or temperature across any part of the unit or its control device, the gauge or instrument employed~~ **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 normal maximum reading for the normal range shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.**
- (b) The Permittee may request **that** the IDEM, OAQ approve the use of ~~a pressure gauge or other~~ **an** instrument that does not meet the above specifications provided the Permittee can demonstrate **that** an alternative ~~pressure gauge or other~~ instrument specification will adequately ensure compliance with permit conditions requiring the measurement of ~~pressure drop or other~~ **the** parameters.

Change No. 5:

IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

C.18 ~~Compliance Response Plan – Preparation, Implementation, Records, and Reports Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]~~

- (a) ~~The Permittee is required to prepare a Compliance Response Plan (CRP), for each compliance monitoring condition of this permit. If a Permittee is required to have an Operations and Maintenance (O&M) Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements of a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP may consist of information contained within the Preventive Maintenance Plan(s) described in Section B – Preventive Maintenance Plan, of this permit. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:~~
- (1) ~~Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.~~
- (2) ~~If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or O&M Plan and the Permittee documents such response in accordance with subsection (c) below, the~~

~~Permittee shall amend its Compliance Response Plan or O&M Plan to include such response steps taken.~~

~~The O&M Plan shall be submitted within the time frames specified by the applicable 40 CFR 63 requirement.~~

- ~~(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:~~
- ~~(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or O&M Plan; or~~
 - ~~(2) If none of the reasonable response steps listed in the Compliance Response Plan or O&M Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.~~
 - ~~(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.~~
 - ~~(4) Failure to take reasonable response steps shall be considered a deviation from the permit.~~
- ~~(c) The Permittee is not required to take any further response steps for any of the following reasons:~~
- ~~(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.~~
 - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied or;~~
 - ~~(3) An automatic measurement was taken when the process was not operating; or~~
 - ~~(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.~~
- ~~(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.~~
- ~~(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~
- ~~(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring~~

~~as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.~~

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.**
- (b) 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). Corrective actions may include, but are not limited to, the following:**
 - (1) initial inspection and evaluation;**
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or**
 - (3) 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.**
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:**
 - (1) monitoring results;**
 - (2) review of operation and maintenance procedures and records;**
 - (3) inspection of the control device, associated capture system, and the process.**
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.**
- (e) The Permittee shall maintain the following records:**
 - (1) monitoring data;**
 - (2) monitor performance data, if applicable; and**
 - (3) corrective actions taken.**

Change No. 6:

During the review process of the submitted modification, existing emission units were determined to be affected sources under 40 CFR 63, Subpart LLL. These affected sources were listed in Section D.1, which does not contain the requirements applicable under 40 CFR 63, Subpart LLL. Since Section D.2 conditions cite the applicable requirements of 40 CFR 63, Subpart LLL, the affected sources have been removed from Section D.1 and have been listed in Section D.2. The 326 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) requirements applicable to the affected sources were also removed from Section D.1 and were placed in Section D.2.

The line identification numbers in Sections D.1 (Facility Description) and D.2 (Facility Description)

have been corrected to correspond to the with the line identification numbers in Condition A.2 for each emission unit and silo 8 has been moved to EU711.

To reflect these modifications and the modifications associated with the CKD2FM Project, the Part 70 Operating Permit has been revised as follows:

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

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

Quarry Activities

(1) remains the same

Raw Material / Clinker Stockpile Operations

(2) through (21) remain the same

Raw Material Sizing Operations

(22) through (33) remain the same

Kiln #1 and kiln #2 Recycled CKD Operations

(34) through (37) remain the same

Kiln #1 and kiln #2 Waste CKD Operations

(38) through (41) remain the same

Kiln #2 Recycled CKD Operations

(42) through (45) remain the same

Kiln #2 Waste CKD Operations

(46) through (48) remain the same

CKD –Silo Storage Facilities

(49) One (1) silo, Silo 15, identified as EU905, constructed in 1965, with particulate emissions controlled by one (1) baghouse, identified as baghouse 144 and CE905, and exhausting to one (1) stack, identified as EP905

Waste CKD Disposal Operations

~~(49) One (1) waste dust tank, identified as EU406, constructed in 1962.~~

(50) Truck unloading, identified as EU407, commenced operation in 1962.

(51) One (1) cement kiln dust haul road system, identified as EU422, constructed in 1962.

(52) One (1) cement kiln dust pile, identified as EU423, commenced operation in 1962.

Clay Processing Operations

(53) through (57) remain the same

Crane Storage Facilities

(58) through (74) remain the same

Raw Mill Facilities

(75) through (82) remain the same

Unloading Station Facilities

(83) through (87) remain the same

Fossil Fuel Facilities

(88) through (95) remain the same

Kiln #1 and kiln #2 Clinker Handling Facilities

(96) through (99) remain the same

Kiln #2 Clinker Handling Facilities

(100) through (103) remain the same

Finish Mill #1 Facilities

(104) through (109) remain the same

Finish Mill #2 Facilities

(110) through (115) remain the same

Finish Product Silo Storage Facilities

(116) Silos 11/12/13/14/15/16/17/18, identified as EU704, constructed in 1965, with emissions controlled by a baghouse, identified as baghouse 126 and CE704, and exhausting to one (1) stack identified as EP704.

(117) Silos 1/ 2/3/4/5/6/7/8, identified as EU709, constructed in 1961, with emissions controlled by a baghouse, identified as baghouse 122 and CE709, and exhausting to one (1) stack identified as EP709.

(118) Silos 8/9/10, identified as EU711, constructed in 1961, with emissions controlled by a baghouse, identified as baghouse 124 and CE711, and exhausting to one (1) stack identified as EP711.

Finish Product Silo Transfer Operations

(119) remains the same

Finish Product Loadout Old Silos (West) Operation

(120) and (121) remain the same

Finish Product Loadout New Silos (East) Operation

(122) remains the same

Finish Product Masonry Packing

(123) through (125) remains the same

Finish Product Portland Packing

(126) through (128) remain the same

Kiln #1 and Kiln #2 Facilities

(129) and (130) remain the same

Clinker Cooler #1 Facilities

(131) remains the same

Clinker Cooler #2 Facilities

(132) remains the same

CKD –To-Finish Mill (CKD2FM) Recycling Operations

(133) One (1) waste dust tank, constructed in 1962, modified in 2005 with the addition of one (1) CKD2FM surge system, collectively identified as EU406, with emissions controlled by a baghouse, constructed in 2005, identified as baghouse 142 and

CE901, and exhausting to one (1) stack identified as EP901.

- (134) One (1) CKD2FM recycling storage tank system, identified as EU902, constructed in 2005, with particulate emissions controlled by one (1) baghouse, identified as baghouse 143 and CE902, and exhausting to one (1) stack, identified as EP902.**
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903, constructed in 2005.**
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904, constructed in 2005.**

SECTION D.1

FACILITY OPERATION CONDITIONS



Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

Quarrying and Raw Material/Clinker Stockpile Operations

(1) through (21) remain the same

Raw Material Sizing Operations

(22) through (33) remain the same

~~Kiln #1 Recycled CKD Operations~~

- ~~(34) — #1 recycled dust elevator, identified as EU408.~~
- ~~(35) — One (1) recycled dust holding tank, identified as EU409.~~
- ~~(36) — One (1) feeder screw and F K pump, identified as EU410.~~
- ~~(37) — #1 recycled dust scoop/insufflation system, identified as EU411.~~

Kiln #1 Waste CKD Operations

- ~~(38) — five (5) discharge hopper screws, identified as EU402.~~
- ~~(39) — one (1) covered 16" cross screw, identified as EU403.~~
- ~~(40) — One (1) #1 waste dust elevator, identified as EU404.~~
- ~~(41) — One (1) 9" cross screw, identified as EU405.~~

Kiln #2 Waste CKD Operations

- ~~(42) — five (5) discharge hopper screws, identified as EU414.~~
- ~~(43) — 16" covered cross screws, identified as EU415.~~
- ~~(44) — #2 waste dust elevator, identified as EU416.~~

CKD –Silo Storage Facilities

- (49) One (1) silo, Silo 15, identified as EU905.**

Waste CKD Disposal Operations

- ~~(45) — One (1) waste dust tank, identified as EU406.~~
- ~~(46) (50) Truck unloading, identified as EU407.~~
- ~~(47) (51) One (1) cement kiln dust haul road system, identified as EU422.~~
- ~~(58) (52) One (1) cement kiln dust pile, identified as EU423.~~

~~Kiln #2 Recycled CKD Operations~~

- ~~(49) — #2 recycled dust elevator, identified as EU417.~~
- ~~(50) — One (1) recycled dust holding tank, identified as EU418.~~
- ~~(51) — One (1) feeder screw and F K pump, identified as EU419.~~
- ~~(52) — #2 recycled dust scoop system/insufflation system, identified as EU420.~~

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

D.1.1 PSD Minor Limits [326 IAC 2-2]

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

- (a) The PM emission rate from Silo 15, identified as EU905, shall not exceed 0.72 pounds per ton of CKD throughput.**
- (b) The PM10 emission rate from Silo 15, identified as EU905, shall not exceed 0.46 pounds per ton of CKD throughput.**

- (c) **The Permittee shall limit the throughput of CKD per twelve consecutive month period, with compliance determined at the end of each month, according to the following:**

| Emission Unit | CKD Throughput (tons) |
|--|-----------------------|
| Silo 15 (EU905) Described in Section D.1 | 65,000 (combined) |
| CKD2FM recycling storage tank system (EU902) Described in Section D.2 | |

Compliance with the above limits, along with the limits in Condition D.2.1, will ensure that total PM and PM10 emissions from Minor Source Modification 017-22319-00005 are less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

D.1.12 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The allowable PM emission rate from the raw material sizing facilities (EU112, EU114 through EU122, and EU201) shall not exceed 70.1 pounds per hour when operating at a process weight rate of 550 tons per hour.
- ~~(b) The allowable PM emission rate from the kiln #1 recycled CKD operations (EU408 through EU411) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.~~
- ~~(c) The allowable PM emission rate from the kiln #1 waste CKD operations (EU402 through EU405) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.~~
- ~~(d) The allowable PM emission rate from the kiln #2 waste CKD operations (EU414 through EU416) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.~~
- ~~(e)~~**(b)** The allowable PM emission rate from the waste CKD disposal operations (EU406 ~~5~~ and EU407) shall not exceed 39.96 pounds per hour (total for all units combined) when operating at a combined process weight rate of 30 tons per hour.
- ~~(f) The allowable PM emission rate from the kiln #2 recycled CKD operations (EU417 through EU420) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.~~

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Note: Complete Descriptions are shown in Section A.2.

Kiln #1 Recycled CKD Operations

(34) through (37) remain the same

- (35) One (1) recycled dust holding tank, identified as EU409.
- (36) One (1) feeder screw and F-K pump, identified as EU410.
- (37) #1 recycled dust scoop/insufflation system, identified as EU411.

Kiln #1 Waste CKD Operations

- (38) five (5) discharge hopper screws, identified as EU402.
- (39) one (1) covered 16" cross screw, identified as EU403.
- (40) One (1) #1 waste dust elevator, identified as EU404.
- (41) One (1) 9" cross screw, identified as EU405.

Kiln #2 Recycled CKD Operations

- ~~(49)~~ (42) #2 recycled dust elevator, identified as EU417.
- ~~(50)~~ (43) One (1) recycled dust holding tank, identified as EU418.
- ~~(51)~~ (44) One (1) feeder screw and F-K pump, identified as EU419.
- ~~(52)~~ (45) #2 recycled dust scoop system/insufflation system, identified as EU420.

Kiln #2 Waste CKD Operations

- ~~(42)~~ (46) five (5) discharge hopper screws, identified as EU414.
- ~~(43)~~ (47) 16" covered cross screws, identified as EU415.
- ~~(44)~~ (48) #2 waste dust elevator, identified as EU416.

Clay Processing Operations

(53) through (57) remain the same

Crane Storage Facilities

(58) through (74) remain the same

Raw Mill Facilities

(75) through (82) remain the same

Unloading Station Facilities

(83) through (87) remain the same

Fossil Fuel Facilities

(88) through (95) remain the same

Kiln #1 Clinker Handling Facilities

(96) through (99) remain the same

Kiln #2 Clinker Handling Facilities

(100) through (103) remain the same

Finish Mill #1 Facilities

(104) through (109) remain the same

Finish Mill #2 Facilities

(110) through (115) remain the same

Finish Product Silo Storage Facilities

- (116) Silos 11/12/13/14/15/16/17/18, identified as EU704.
- (117) Silos 1/2/3/4/5/6/7/8, identified as EU709.
- (118) Silos 8/9/10, identified as EU711.

Finish Product Silo Transfer Operations

- (119) remains the same

Finish Product Loadout Old Silos (West) Operation

- (120) and (121) remain the same

Finish Product Loadout New Silos (East) Operation

- (122) remains the same

Finish Product Masonry Packing

- (123) through (125) remain the same

Finish Product Portland Packing

- (126) through (128) remains the same

CKD –To-Finish Mill (CKD2FM) Recycling Operations

- (133) One (1) waste dust tank, and one (1) CKD2FM surge system, identified as EU406.
- (134) One (1) CKD2FM recycling storage tank system, identified as EU902.
- (135) One (1) CKD2FM #1 FM recycling system, identified as EU903.
- (136) One (1) CKD2FM #2 FM recycling system, identified as EU904.

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

D.2.1 PSD Minor Limits [326 IAC 2-2]

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

- (a) PM and PM10 emissions shall be limited as follows:

| Emission Unit | PM | PM10 |
|--|--------------------------|---------------------------|
| CKD2FM recycling storage tank system (EU902) | 0.72 (lb/ton of CKD) | 0.46 (lb/ton of CKD) |
| CKD2FM #1 FM recycling system (EU903) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |
| CKD2FM #2 FM recycling system (EU904) | 0.003 (lb/ton of CKD) | 0.0011 (lb/ton of CKD) |

- (b) The Permittee shall limit the throughput of CKD per twelve consecutive month period, with compliance determined at the end of each month, according to the following:

| Emission Unit | CKD Throughput (tons) |
|---|-----------------------|
| Silo 15 (EU905) Described in Section D.1 | 65,000 (combined) |

| Emission Unit | CKD Throughput (tons) |
|--|-----------------------|
| CKD2FM recycling storage tank system (EU902) | 65,000 (combined) |
| CKD2FM #1 FM recycling system (EU903) | |
| CKD2FM #2 FM recycling system (EU904) | |

Compliance with the above limits, along with the limits in Condition D.1.1, will ensure that total PM and PM10 emissions from Minor Source Modification 017-22319-00005 are less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

D.2.42 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The allowable PM emission rate from the kiln #1 recycled CKD operations (EU408 through EU411) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.**
- (b) The allowable PM emission rate from the kiln #1 waste CKD operations (EU402 through EU405) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.**
- (c) The allowable PM emission rate from the kiln #2 waste CKD operations (EU414 through EU416) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a combined process weight rate of 15 tons per hour.**
- (d) The allowable PM emission rate from the kiln #2 recycled CKD operations (EU417 through EU420) shall not exceed 25.16 pounds per hour (total for all units combined) when operating at a process weight rate of 15 tons per hour.**
- ~~(e)~~ The allowable PM emission rate from the clay processing facilities (EU123 through EU125, and EU127) shall not exceed 39.96 pounds per hour (total for all units combined) when operating at a process weight rate of 30 tons per hour.
- ~~(2)f)~~ The allowable PM emission rate from the raw material storage process (EU202, EU204, EU210, EU211, EU213 and EU214) shall not exceed 58.51 pounds per hour (total for all units combined) when operating at a process weight rate of 200 tons per hour.
- ~~(3)g)~~ The allowable PM emission rate from the process for transferring clinker from storage bins to finish mills (EU505 through EU509, EU511, EU520, EU521, and EU523 through EU525) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- ~~(4)h)~~ The allowable PM emission rate from the raw mill facilities (EU205-209 and EU212, and EU215 and EU216) shall not exceed 57.07 pounds per hour (total for all units combined) when operating at a process weight rate of 175 tons per hour.
- ~~(5)i)~~ The allowable PM emission rate from the unloading station facilities (EU307 through EU311) shall not exceed 58.51 pounds per hour (total for all units combined) when

operating at a process weight rate of 200 tons per hour.

- ~~(6)~~(j) The allowable PM emission rate from the fossil fuel facilities (EU314 through EU324) shall not exceed 58.51 pounds per hour (total for all units combined) when operating at a process weight rate of 200 tons per hour.
- ~~(7)~~(k) The allowable PM emission rate from the kiln #1 clinker handling facilities (EU501 through EU504) shall not exceed 42.97 pounds per hour (total for all units combined) when operating at a process weight rate of 42 tons per hour.
- ~~(8)~~(l) The allowable PM emission rate from the kiln #2 clinker handling facilities (EU516 through EU519) shall not exceed 42.97 pounds per hour (total for all units combined) when operating at a combined process weight rate of 42 tons per hour.
- ~~(9)~~(m) The allowable PM emission rate from the finish mill #1 (EU601 through EU603) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- ~~(10)~~(n) The allowable PM emission rate from the finish mill #2 (EU604 through EU606) shall not exceed 43.6 pounds per hour (total for all units combined) when operating at a process weight rate of 45 tons per hour.
- ~~(11)~~(o) The allowable PM emission rate from the silos (EU703 through EU705 and EU707 through EU711) shall not exceed 66.89 pounds per hour (total for all units combined) when operating at a process weight rate of 420 tons per hour.
- ~~(12)~~(p) The allowable PM emission rate from the west bulk truck loadout (EU712) shall not exceed 67.7 pounds per hour when operating at a process weight rate of 450 tons per hour.
- ~~(13)~~(q) The allowable PM emission rate from the east bulk truck loadout (EU706) shall not exceed 67.7 pounds per hour when operating at a process weight rate of 450 tons per hour.
- ~~(14)~~(r) The allowable PM emission rate from the truck/RR car unloading process and internal transfer to silos (EU701 and EU702) shall not exceed 51.28 pounds per hour (total for both units combined) when operating at a process weight rate of 100 tons per hour.
- ~~(15)~~(s) The allowable PM emission rate from the bulk RR loadout process (EU713) shall not exceed 51.28 pounds per hour when operating at a process weight rate of 100 tons per hour.
- ~~(16)~~(t) The allowable PM emission rate from the finish product masonry packing (EU801 through EU803) shall not exceed 43.4 pounds per hour (total for all units combined) when operating at a process weight rate of 44 tons per hour.
- ~~(17)~~(u) The allowable PM emission rate from the finish product portland packing (EU804 through EU806) shall not exceed 43.4 pounds per hour (total for all units combined) when operating at a process weight rate of 44 tons per hour.
- (v) The allowable PM emission rate from the waste dust tank, and CKD2FM surge**

system (EU406) shall not exceed 39.96 pounds per hour when operating at a process weight rate of 30 tons per hour.

- (w) **The allowable PM emission rate from the CKD2FM recycling storage tank system, and CKD2FM #1FM and #2FM shall not exceed 24.03 pounds per hour (total for all units combined) when operating at a process weight rate of 14 tons per hour.**

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) **For affected sources existing on or before June 14, 2002:**

No later than 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limits established in Condition D.2.4 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing.

- (b) **For affected sources modified or constructed after June 14, 2002:**

No later than 90 day after start-up, the Permittee shall demonstrate initial compliance with the limits established in Condition D.2.4 by conducting a test in accordance with 40 CFR 63.1349, Method 9 of 40 CFR Part 60, Appendix A, and Section C - Performance Testing.

- ~~(b)~~ (c) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM testing on the Finish mill #1 (EU601 through EU603), Finish mill #2 (EU604 through EU606), and Raw Mills (EU205 through EU209, EU212, EU215, and EU216) utilizing methods as approved by the Commissioner. These tests shall be conducted within 180 days after issuance of this Part 70 permit. These tests shall be repeated at least once every five years. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.9 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for each affected source by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, **or before startup for affect sources modified or constructed after June 14, 2002.** The plan shall include the following information:

D.2.14 Reporting Requirements

- (a) remains the same

- (1) The plan required by Condition D.2.9 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry **or before startup for affect sources modified or constructed after June 14, 2002.**

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

Part 70 Quarterly Report for CKD Throughput EU902 to EU905

Source Name: ESSROC Cement Corporation
 Source Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Mailing Address: State Road 25 South, 3084 W. C.R. 225 South, Logansport, Indiana
 Part 70 Permit No.: T017-6033-00005
 Facility: Silo 15 (EU905) and CKD2FM recycling storage tank system (EU902)
 CKD2FM #1 FM (EU903) and CKD2FM #2 FM (EU904)
 Parameter: Cement Kiln Dust (CKD) throughput
 Limit: 65,000 tons per twelve (12) consecutive month period for EU905 and EU902
 combined.
 65,000 tons per twelve (12) consecutive month period for EU905 and EU902
 combined.

FACILITY: _____ YEAR: _____

| Monthly CKD throughput (tons) | | | | | |
|---|--------------------|----------------|--|--------------------|----------------|
| Silo 15 (EU905) and CKD2FM recycling storage tank system (EU902) (combined) | | | CKD2FM #1 FM (EU903) and CKD2FM #2 FM (EU904) (Combined) | | |
| This Month | Previous 11 Months | 12 Month Total | This Month | Previous 11 Months | 12 Month Total |
| | | | | | |
| | | | | | |
| | | | | | |

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

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

Attach a signed certification to complete this report.

Change No. 7:

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been removed.

Modifications to the recordkeeping requirements are shown in "Change No. 11".

~~D.1.34 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the **emission** control devices listed in this section.~~

~~D.1.7 Baghouse Inspections~~

~~An inspection shall be performed during every major maintenance outage, but no less than once every fourteen (14) months, of all bags controlling the facilities listed in this section. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.2.56 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the **emission** control devices listed in this section.~~

~~D.2.11 Baghouse Inspections~~

~~An inspection shall be performed during every major maintenance outage, but no less than once every fourteen (14) months, of all bags controlling the facilities listed in this section. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~(a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the **their emission** control devices.~~

~~(b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:~~

~~(1) Plate and electrode alignment, every major maintenance outage, but no less than every 14 months;~~

~~(2) ESP TR set components, performed whenever there is an ESP outage of any nature lasting more than five days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:~~

~~(A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).~~

~~(B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).~~

~~(C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).~~

- ~~(D) — Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).~~
- ~~(E) — Major misalignment of plates (including but not limited to a visual check of plate alignment).~~
- ~~(F) — Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication)~~
- ~~(G) — Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).~~
- ~~(H) — Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).~~
- ~~(I) — TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).~~
- ~~(J) — Vibrator air pressure settings.~~
- ~~(3) — Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.~~

~~Appropriate response steps for any failures, malfunctions, or abnormal conditions in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their **emission** control devices.

~~D.4.10 Baghouse Inspections~~

~~An inspection shall be performed during every major maintenance outage, but no less than once every fourteen (14) months, of all bags controlling the clinker coolers. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

Change No. 8:

Upon further review, IDEM has determined that once per day monitoring of the control device and of visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.

Modifications to the recordkeeping requirements are shown in "Change No. 11".

D.1.56 Visible Emissions Notations

(a) through (d) remain the same

- (e) If **abnormal** visible emissions are **observed** present at any baghouse stack, the Permittee shall implement appropriate procedures as set out in its Compliance Response Plan for such facility **take reasonable response steps in accordance with Section C-**

Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

D.1.67 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other~~ Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.910 Visible Emissions Notations

(a) through (d) remain the same

(e) On days that the NESHAP monitoring required in Condition D.2.89 is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.

(f) If **abnormal** visible emissions are **observed present at any baghouse stack**, the Permittee shall ~~implement appropriate procedures as set out in its Compliance Response Plan for such facility~~ **take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances**. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

D.2.1011 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other~~ Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.14 ESP Parametric Monitoring and ESP Inspections

(a) The ability of the ESP to control particulate emissions shall be monitored ~~continuously~~ **once per day**, when the kilns are in operation, by measuring and recording the number of

T-R sets in service and the ESP total power.

- (b) Reasonable response steps shall be taken in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances** whenever the percentage of T-R sets in service falls below 90 percent (90%).

Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

- (c) The instrument used for determining the total power shall comply with Section C - ~~Pressure Gauge and Other Instrument Specifications~~ of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

D.4.9 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across each baghouse, 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 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside of the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other Instrument Specifications~~ of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Change No. 9:

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Condition D.1.45, D.2.78, and D.3.10, requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.

IDEM has determined that for processes equipped with a COM, the requirement to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days is not required. The clinker coolers #1 and #2 are equipped with COMS; therefore, the requirement will not be added to Condition D.4.7.

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

IDEM has determined that for processes equipped with a COM, the Broken or Failed Baghouse

condition is not required. The clinker coolers #1 and #2 are equipped with COMS; therefore, Condition D.4.11 will be removed from the permit.

D.1.45 Particulate Matter (PM) Control [326 IAC 2-7-6(6)]

~~Except as otherwise provided by statute, rule, or this permit, in order to comply with the limits in Conditions D.1.1 and D.1.3, each baghouse for PM control shall be in operation at all times when its associated facility is in operation.~~

- (a) **In order to comply with D.1.2 and D.1.4, the baghouses for particulate control shall be in operation and control emissions at all times its associated facility is in operation.**
- (b) **In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

D.1.8 Broken or Failed Bag Detection

~~In the event that bag failure has been observed.~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.~~
- (b) (a) **For a single compartment baghouses controlling emissions from a process operated continuously, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process shall be shut down immediately until the failed units have 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 emissions unit. 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).**

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.78 Particulate Matter (PM) Control [326 IAC 2-7-6(6)]

~~Except as otherwise provided by statute, rule, or this permit, in order to comply with conditions D.2.1 and D.2.3, each baghouse for PM control shall be in operation at all times when its associated facility is in operation.~~

- (a) In order to comply with D.2.1 and D.2.3, the baghouses for particulate control shall be in operation and control emissions at all times their associated facility is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.12 Broken or Failed Bag Detection

~~In the event that bag failure has been observed.~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.~~
- (b) (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units have **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 emissions unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.3.10 Particulate Matter (PM)-Control [326 IAC 2-7-6(6)]

~~Except as otherwise provided by statute, rule, or this permit, in order to comply with the limits in Conditions D.3.3 and D.3.4, the ESP for PM control shall be in operation at all times when either of the kilns is in operation, except as otherwise provided by statute, rule or this permit.~~

- (a) **In order to comply with D.3.3 and D.3.4, the ESP for particulate control shall be in operation and control emissions from either kiln at all times either kiln is in operation.**
- (b) **In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

D.4.7 Particulate Matter (PM)-Control [326 IAC 2-7-6(6)]

~~In order to comply with Condition D.4.2, each baghouse for PM **particulate** control shall be in operation **and control emissions from its associated clinker cooler** at all times when its associated clinker cooler is in operation, except as otherwise provided by statute, rule or this permit.~~

D.4.11 Broken or Failed Bag Detection

~~In the event that bag failure has been observed.~~

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.~~
- (b) ~~For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process be shut down immediately until the failed units have 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).~~

Change No. 10:

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

Modifications to the recordkeeping requirements are shown in "Change No. 11".

D.3.15 Visible Emissions Notations

- (a) ~~Whenever a continuous opacity monitor (COM) COMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour~~ **twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMs**, and the process is operating, ~~compliance with the applicable opacity limits shall be demonstrated by the following:~~
- (1) ~~Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.~~
- (A) ~~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.~~
- (B) ~~If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.~~
- (C) ~~VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.~~
- (2)(1) ~~If a COM is not online within twenty-four (24) hours, the~~ **The** Permittee shall provide **a** certified opacity reader(s), who may be **an** employees of the Permittee or **an** independent contractors, to self-monitor the emissions from the emission unit stack.
- (A) 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.
- (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least ~~once every four (4) hours~~ **twice per day** during daylight operations, **with at least four (4) hours between each set of readings**, until ~~such time that a COMS is in operation~~ **online**.
- (C) Method 9 readings may be discontinued once a COM is online.
- (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

~~(3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit~~

- (b) 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 63, Subpart EEE.

D.4.4210 Visible Emissions Notations

- (a) Whenever a ~~continuous opacity monitor (COM)~~ COMS is malfunctioning or ~~will be down for calibration, maintenance, or repairs for a period of one (1) hour~~ **twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMs**, and the process is operating, ~~compliance with the applicable opacity limits shall be demonstrated by the following:~~

~~(1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.~~

~~(A) 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.~~

~~(B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.~~

~~(C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.~~

~~(2)~~**(1)** If a COM is not online within ~~twenty four (24) hours~~, the **The** Permittee shall provide a certified opacity reader(s), who may be ~~an~~ employees of the Permittee or ~~an~~ independent contractors, to self-monitor the emissions from the emission unit stack.

(A) 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.

(B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least ~~once every four (4) hours~~ **twice per day** during daylight operations, **with at least four (4) hours between each set of readings**, until ~~such time that~~ a COMS is in operation **online**.

(C) Method 9 readings may be discontinued once a COM is online.

(D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

~~(3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit~~

- (b) 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 63, Subpart EEE.

Change No. 11:

Modifications to Recordkeeping Requirements are as follows:

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.56, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per day and of the visible emission notations of the quarry activities once per day.
- (b) To document compliance with Condition D.1.67, the Permittee shall maintain records of the pressure drop once per day during normal operation when venting to the atmosphere:
- ~~(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.~~
- ~~(d) To document compliance with Condition D.1.34, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(e)~~(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.910, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per day.
- (b) To document compliance with Condition D.2.4011, the Permittee shall maintain records of the pressure drop once per day during normal operation when venting to the atmosphere:
- ~~(c) To document compliance with Condition D.2.11, the Permittee shall maintain records of the results of the inspections required under Condition D.2.11.~~
- ~~(d)~~ (c) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
- (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:

- (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
- (B) All records of applicability determination, including supporting analyses.
- ~~(f) To document compliance with Condition D.2.56, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(g)~~(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.16 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1 and D.3.11, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken on a calendar month average and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.3.1.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual coal and fuel oil usage since last compliance determination period;
 - (3) Sulfur content and heat content of both the coal and the fuel oil;
 - (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 compliance with Conditions D.3.9, D.3.12, D.3.14, and D.3.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.3 and D.3.4.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
 - (3) All ESP parametric monitoring readings.
 - (4) **The results of all All visible emission readings and Method 9 visible emission opacity readings whenever required by D.3.15.**
 - (5) All preventive maintenance measures taken.
 - (6) All response steps taken and the outcome for each.
- (d) To document compliance with the HWC NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1210 and 40 CFR 63.1211, including, but not limited to, the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by this rule recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).

- (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
- (e) The Permittee shall maintain the following records:
 - (1) Pursuant to 40 CFR 61.356(e)(1), the Permittee shall maintain a statement signed and dated by the Permittee certifying that the treatment unit (cement kiln) is designed to operate at the documented performance level when the waste stream entering the unit is at the highest stream flow rate and benzene content expected to occur. The documentation shall be retained for the life of the cement kilns.
 - (2) Pursuant to 40 CFR 61.356(e)(2), if engineering calculations are used, the Permittee shall maintain all records necessary to demonstrate the cement kiln performance as specified in 40 CFR 61.356(e)(2).
 - (3) Pursuant to 40 CFR 61.356(e)(3), if performance tests are used, the Permittee shall maintain all test information necessary to demonstrate the cement kiln performance as specified in 40 CFR 61.356(e)(3)(i) through (iv).
 - (4) Pursuant to 40 CFR 61.356(i), the Permittee shall maintain documentation that includes the following information regarding the cement kiln operation:
 - (A) Dates of startup and shutdown of the units.
 - (B) For a process parameter monitored in accordance with 40 CFR 61.354(a)(2), the Permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the units will be operated in conformance with the standard in 40 CFR 61.348(c) and the units' design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the equipment.
 - (C) Periods when the units are not operated as designed.
- ~~(f) To document compliance with Condition D.3.8, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(g)~~**(f)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.1311 Record Keeping Requirements

- (a) To document compliance with Conditions D.4.5 and D.4.6, the Permittee shall maintain records in accordance with (1) and (2) below.
 - (1) Data and results from the most recent stack test.

- (2) All continuous emissions monitoring data.
- (b) To document compliance with Condition D.4.12~~10~~, whenever ~~visible emission readings or~~ Method 9 opacity readings are required, the Permittee shall maintain records of the readings.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain records of the pressure drop once per day during normal operation when venting to the atmosphere:
- ~~(d) To document compliance with Condition D.4.10, the Permittee shall maintain records of the results of the inspections required under Condition D.4.10.~~
- ~~(e)~~ **(d)** To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
- ~~(f) To document compliance with Condition D.4.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(g)~~ **(e)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Change No. 12:

A statement was added to B.8 Certification in order to clarify that the certification form may cover more than one document that is submitted.

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

- (a) remains the same
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. **One (1) certification may cover multiple forms in one (1) submittal.**
- (c) remains the same

Change No. 13:

The section's name that collects operating fees has changed. Section B - Annual Fee Payment has been updated to reflect the new name and new local phone number.

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

- (a) remains the same
- (b) remains the same
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 **4230** (ask for OAQ, Technical Support and Modeling **Billing, Licensing, and Training** Section), to determine the appropriate permit fee.

Change No. 14:

Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, the condition reflecting this rule will be incorporated into your permit as follows:

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.

Change No. 15:

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition C.1 has been revised to remove (a) which contained these requirements, and since the requirements of the 326 IAC 6-3-2(d) that were effective June 12, 2002 are now federally enforceable, the last statements from C.1 has been removed.

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]

- ~~(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.~~
- ~~(b) Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from any process not already exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.~~

Change No. 16:

The following revisions were made to the Emission Statement condition to incorporate the revisions to 326 IAC 2-6 that became effective March 27, 2004. The revised rule was published in the April 1, 2004 Indiana Register.

C.20 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) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6(a)(1), that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~

(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 ~~criteria~~ **all** pollutants ~~from the source, listed in compliance with 326 IAC 2-6-4(a); (Emission Reporting);~~
- (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 purposes of ~~Part 70~~ fee assessment.

~~(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:~~

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

~~(b)~~ (b) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

Change No. 17:

Section C - General Record Keeping Requirements and Section C - General Reporting Requirements have been revised to reflect NSR reform provisions at the major sources.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] **[326 IAC 2-2]**

(a) remains the same

(b) remains the same

(c) **If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with**

following:

- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1 (qq)) 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(rr)(2)(A)(iii); and**
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.**
- (2) 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**
- (3) 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.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(a) through (d) remain the same

- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.**
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:**
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and**
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).**
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:**

- (1) **The name, address, and telephone number of the major stationary source.**
- (2) **The annual emissions calculated in accordance with (c)(2) and (3) 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)).**
- (4) **Any other information that the Permittee deems fit to include in this report,**

Reports required in this part shall be submitted to:

**Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251**

- (h) **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.**

Change No. 18:

The mailing address of IDEM, Office of Air Quality (OAQ) has changed. All references in the permit to "100 North Senate Ave, Post Office Box 6015, Indianapolis, Indiana 46206-6015" have been changed to "100 North Senate Ave, Indianapolis, Indiana 46204-2251".

Change No. 19:

The table of contents has been modified to reflect all changes made to the permit. Where conditions were deleted, subsequent conditions were renumbered as appropriate.

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 017-22319-00005 and Significant Permit Modification No. 017-22539-00005. The staff recommend to the Commissioner that this Part 70 Minor Source and Significant Permit Modification be approved.

Appendix A: Emissions Calculations

Company Name: ESSROC Cement Corporation
 SPM Permit No.: 017-22319-00005
 MSM Permit No.: 017-22549-00005
 Part 70 Permit No.: 017-6033-00005
 Reviewer: Jenny Acker
 Date: 12/6/2005

| PTE from CKD2FM | | | | | | | | | | | | |
|-----------------|--------------------------------------|---|---|-----------------|------------|--------|-------------------------|-------|--------------|--------------|------|-------|
| EU No. | EU Description | Factor Type | Value | | | Units | Process | | | PM | PM10 | |
| | | | Value | | Throughput | | Notes | Hours | | | | |
| | | | [PM (lb/ton)] | [PM10 (lb/ton)] | | | | | [tons/yr] | | | [tpy] |
| EU406 | Waste CKD Tank & CKD2FM Surge System | AP-42 Emission Factor 5th ed., Sec. 11.12-2. | Loading into the CKD tank emissions are already accounted for. The screw conveyors located at the bottom of the CDK tank are completely enclosed. Any emissions are contained | | | | | | | | | |
| EU902 | CKD2FM Recycling Storage Tank System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.7200 | 0.4600 | lbs/ton | 122640 | 14 tph (max capacity) | 8,760 | 44.15 | 28.21 | | |
| EU905 | Silo #15 CKD Storage | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.7200 | 0.4600 | lbs/ton | 96360 | 11 tph (max capacity) | 8,760 | 34.69 | 22.16 | | |
| EU903 | CKD2FM #1 FM Recycling System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.0030 | 0.0011 | lbs/ton | 144540 | 16.5 tph (max capacity) | 8,760 | 0.22 | 0.08 | | |
| EU904 | CKD2FM #2 FM Recycling System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.0030 | 0.0011 | lbs/ton | 30660 | 3.5 tph (max capacity) | 8,760 | 0.05 | 0.02 | | |
| Totals | | | | | | | | | 79.10 | 50.47 | | |

| PTE from CKD2FM - Limited Material Throughput | | | | | | | | | | | |
|---|--------------------------------------|--|---------------|-----------------|------------|--------|---------|-------|--------------|--------------|------|
| EU No. | EU Description | Factor Type | Value | | | Units | Process | | | PM | PM10 |
| | | | Value | | Throughput | | Notes | Hours | | | |
| | | | [PM (lb/ton)] | [PM10 (lb/ton)] | | | | | [tons/yr] | | |
| EU902 | CKD2FM Recycling Storage Tank System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.7200 | 0.4600 | lbs/ton | 65,000 | | 8,760 | 23.40 | 14.95 | |
| EU905 | Silo #15 Storage | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.7200 | 0.4600 | lbs/ton | | | 8,760 | | | |
| EU903 | CKD2FM #1 FM Recycling System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.0030 | 0.0011 | lbs/ton | 65,000 | | 8,760 | 0.10 | 0.04 | |
| EU904 | CKD2FM #2 FM Recycling System | AP-42 Emission Factor 5th ed., Sec. 11.12-2 | 0.0030 | 0.0011 | lbs/ton | | | 8,760 | | | |
| Totals | | | | | | | | | 23.50 | 14.99 | |

| PTE from CKD2FM | | | | | | | | |
|-----------------|--------------------------------------|---------------|--------------|------------------------|--------------|---------------------------------------|-------------|-------------|
| EU No. | EU Description | Unlimited PTE | | Limited Throughput PTE | | Limited Throughput PTE after Controls | | |
| | | PM (tpy) | PM10 (tpy) | PM (tpy) | PM10 (tpy) | Baghouse Eff (%) | PM (tpy) | PM10 (tpy) |
| EU902 | CKD2FM Recycling Storage Tank System | 44.150 | 28.207 | 23.4000 | 14.9500 | 99.8% | 0.0468 | 0.0299 |
| EU905 | Silo #15 Storage | 34.690 | 22.163 | | | 99.8% | | |
| EU903 | CKD2FM #1 FM Recycling System | 0.217 | 0.079 | 0.0975 | 0.0358 | 99.8% | 0.0002 | 0.0001 |
| EU904 | CKD2FM #2 FM Recycling System | 0.046 | 0.017 | | | 99.8% | | |
| Totals: | | 79.10 | 50.47 | 23.50 | 14.99 | | 0.05 | 0.03 |