



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 23, 2009

RE: Hydraulic Press Brick Company / 109-26822-00007

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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Toll Free (800) 451-6027
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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Hydraulic Press Brick Company
Centerton Road
Brooklyn, Indiana IN 46111**

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

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

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

Operation Permit No.: T109-26822-00007	
Issued by:  Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 23, 2009 Expiration Date: July 23, 2014

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 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 stationary shale processing plant producing lightweight expanded shale aggregate.

Source Address:	Centerton Road, Brooklyn, Indiana IN 46111
Mailing Address:	P.O. Box 7, Brooklyn, IN 46111-0007
General Source Phone Number:	317-831-0710
SIC Code:	3295
County Location:	Morgan
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Nonattainment NSR Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 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:

- (a) One (1) pre-kiln shale processing operation, identified as pre-kiln, constructed in 1954, with a maximum capacity of 200 tons of raw shale per hour, using wet suppression of fugitive dust as control, and exhausting fugitively, and consisting of the following equipment:
 - (1) one (1) primary crusher, identified as PK1, with a maximum capacity of 200 tons of raw shale per hour,
 - (2) one (1) secondary crusher, identified as PK2, with a maximum capacity of 100 tons of raw shale per hour,
 - (3) six (6) conveyors, identified as PK3 through PK8, each with a maximum capacity of 200 tons of raw shale per hour;
- (b) One (1) rotary kiln, identified as K3, constructed in 1959, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of 20 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4;
- (c) one (1) rotary kiln, identified as K4, constructed in 1962, with a maximum heat input of 100 million British Thermal Units (MMBtu) per hour burning No. 4 fuel oil, natural gas or bituminous coal, with a maximum capacity of 15 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4;
- (d) One (1) rotary kiln, identified as K5, constructed in 1966, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of

- 30 tons of raw shale per hour, using a cloth baghouse as control, and exhausting to stack ST5;
- (e) One (1) haydite crusher line, identified as HCR, constructed in 1962, with a maximum capacity of 100 tons of expanded shale per hour, using wet suppression of fugitive dust as control, exhausting fugitively, and consisting of the following equipment:
 - (1) one (1) primary haydite crusher, identified as HCR1, with a maximum capacity of 100 tons of expanded shale per hour,
 - (2) one (1) secondary haydite crusher, identified as HCR2, with a maximum capacity of 100 tons of expanded shale per hour,
 - (3) three (3) screens, identified as HCR3 through HCR5, each with a maximum capacity of 100 tons of expanded shale per hour, and
 - (4) seven (7) conveyors, identified as HCR9 through HCR15, each with a maximum capacity of 100 tons of expanded shale per hour;
 - (f) One (1) reciprocating grate clinker cooler, identified as CLNKCOOL, constructed in 1966, with a maximum capacity of 40 tons of expanded shale per hour, using a multiclone as control, and exhausting to stack ST2; and
 - (g) One (1) expanded shale aggregate crusher line, identified as ESA, constructed in 2000, with a maximum capacity of 30 tons of expanded shale per hour and consisting of the following equipment:
 - (1) one (1) expanded shale aggregate crusher, identified as ESA 1, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6,
 - (2) one (1) screen, identified as ESA 2, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6, and
 - (3) five (5) conveyors, identified as ESA 3 through ESA 7, each with a maximum capacity of 30 tons of expanded shale per hour, utilizing a water spray system on the feed conveyor as particulate control and exhausting fugitively.

Under 40 CFR 60, Subpart OOO, these crushers, screens, and conveyors are affected facilities in a fixed nonmetallic mineral processing plant [40 CFR 60, Subpart OOO].

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):

- (a) Paved and unpaved roads and parking lots with public access; [326 IAC 6-4]
- (b) Other activities or categories not previously identified with emissions below insignificant thresholds: [326 IAC 6-4]
 - (1) One coal silo, identified as silo 6,
 - (2) One (1) coal unloading operation, with a maximum capacity of 280 tons of coal per hour, consisting of one (1) dump pit, one (1) hopper for coal unloading, and two (2) conveyors,
 - (3) Four (4) covered silos, identified as silos 3, 4, 5A, and 5B, each with a maximum capacity of 200 tons of raw shale,
 - (4) Three (3) hoppers, identified as HCR6 through HCR8, each with a maximum capacity of 100 tons of raw shale per hour,

- (5) Two (2) chutes, identified as HCR16 and HCR17, each with a maximum capacity of 100 tons of expanded shale per hour.

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);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T109-26822-00007, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "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, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

and

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

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

The submittal by the Permittee does require 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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs 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 Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require 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. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) 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.
 - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

- (b) 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.
- (c) 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.
- (d) 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.
- (e) 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).
- (f) 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)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T109-26822-00007 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require 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.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

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

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

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

Any such application shall be certified by 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.19 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) 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.20 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (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.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 and/or 326 IAC 2-3.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

The application which shall be submitted by the Permittee does require 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.24 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.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.6 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

C.8 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require the 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.11 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.12 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.13 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 May 02, 1999.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.15 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; and/or
 - (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.16 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 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.17 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) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2 6 4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require 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.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
[326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) 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/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2][326 IAC 2-3]

- (a) The Permittee 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) 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 (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) 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) and/or 326 IAC 2-3-1 (qq), 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 (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

- (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.

Stratospheric Ozone Protection

C.20 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)]:

- (a) One (1) pre-kiln shale processing operation, identified as pre-kiln, constructed in 1954, with a maximum capacity of 200 tons of raw shale per hour, using wet suppression of fugitive dust as control, and exhausting fugitively, and consisting of the following equipment:
- (1) one (1) primary crusher, identified as PK1, with a maximum capacity of 200 tons of raw shale per hour,
 - (2) one (1) secondary crusher, identified as PK2, with a maximum capacity of 100 tons of raw shale per hour,
 - (3) six (6) conveyors, identified as PK3 through PK8, each with a maximum capacity of 200 tons of raw shale per hour.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the following:

- (a) the one (1) primary crusher and six (6) conveyors shall each not exceed 58.51 pounds per hour when each operating at a process weight rate of 400,000 pounds per hour.
- (b) the one (1) secondary crusher shall not exceed 51.28 pounds per hour when operating at a process weight rate of 200,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

D.1.2 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 the control device.

Compliance Determination Requirements

D.1.3 Particulate Control

In order to comply with Condition D.1.1, the water spray system for particulate control shall be in operation and control emissions from the pre-kiln shale processing operation at all times that the pre-kiln shale processing is in operation except when the ambient temperature is at or below the freezing point.

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

D.1.4 Visible Emissions Notations

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

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

D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain once per day records of visible emission notations of the pre-kiln shale processing operation stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate each day).
- (b) 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)]:

- (a) One (1) rotary kiln, identified as K3, constructed in 1959, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of 20 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4.
- (b) one (1) rotary kiln, identified as K4, constructed in 1962, with a maximum heat input of 100 million British Thermal Units (MMBtu) per hour burning No. 4 fuel oil, natural gas or bituminous coal, with a maximum capacity of 15 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4.
- (c) One (1) rotary kiln, identified as K5, constructed in 1966, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of 30 tons of raw shale per hour, using a cloth baghouse as control, and exhausting to stack ST5.

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

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

D.2.1 Particulate [326 IAC 6-3-2]

- (a) The one (1) rotary kiln (ID K3) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 40,000 pounds per hour of crushed shale (equivalent to 20 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

- (b) The one (1) rotary kiln (ID K4) shall not exceed 25.16 pounds per hour when operating at a process weight rate of 30,000 pounds per hour of crushed shale (equivalent to 15 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

- (c) The one (1) rotary kiln (ID K5) shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of crushed shale (equivalent to 30 tons per hour).

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty

thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

D.2.2 PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

- (a) The use of No. 4 fuel oil in rotary kiln K4 shall be limited based on 0.5% sulfur content to less than 0.99 million gallons per twelve (12) month consecutive period.
- (b) The PM-10 emissions from #4 fuel oil use shall be limited to less than 3.42 pounds per hour.

Compliance with these limits shall ensure that the emissions of SO₂ and NO_x are each limited to 39 tons per twelve consecutive month period, and the emissions of PM-10 are limited to 15 tons per twelve consecutive month period, rendering 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.2.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations):

- (a) The sulfur dioxide emissions from each of the three (3) rotary kilns (IDs K3, K4 and K5) when burning coal, shall not exceed six (6) pounds per MMBtu of coal combustion.
- (b) The sulfur dioxide emissions from the one (1) rotary kiln (ID K4) when burning No. 4 fuel oil shall be limited to 0.5 pounds per MMBtu of heat input from No. 4 fuel oil.

D.2.4 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 control devices.

Compliance Determination Requirements

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

- (a) In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM testing on the two (2) rotary kilns (K4 and K5) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.
- (b) The Permittee shall perform PM testing on Kiln #3 within ninety (90) days of the start-up of this unit, using methods 5 or 17 (40 CFR 60, Appendix A) or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (c) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM₁₀ testing on kiln K4 when burning oil within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8, 2008. In the event that kiln K4 is not burning oil at the time revised condensible PM test method(s) are published, PM₁₀ testing shall be performed within 180 days of burning oil in Kiln #4 after the date of publication of condensible PM test methods. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensible PM.

D.2.6 Particulate Control

In order to comply with condition D.2.1:

- (a) The wet scrubber for particulate control shall be in operation and control emissions from the two (2) rotary kilns (K3 and K4) at all times that the two (2) rotary kilns (K3 and K4) are in operation.
- (b) The baghouse for particulate control shall be in operation and control emissions from the one (1) rotary kiln at all times that the one (1) rotary kiln (K5) is in operation.
- (c) 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.2.7 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed six (6.0) pounds per MMBtu when burning coal. Compliance shall be determined utilizing the following options:

- (a) Sampling and analyzing the coal using one of the following procedures:
 - (1) Minimum Coal Sampling Requirements and Analysis Methods:
 - (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 one (1) time per day;
 - (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 3-7-3; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, 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) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR Part 64]

D.2.8 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the two (2) rotary kilns (IDs K3 and K4) wet scrubber stack (S/V ID ST4) and the one (1) rotary kiln (ID K5) baghouse stack (S/V ID ST 5) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The 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 violation of this permit.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

D.2.9 Parametric Monitoring [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the wet scrubber used in conjunction with the two (2) rotary kilns (IDs K3 and K4), at least once per day when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet scrubber is below the pressure drop of 8.0 inches of water and above, and the flow rate for scrubbing liquid is below the normal flow rate of 100 gallons per minute or above, 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 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 violation of 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.

- (b) The Permittee shall record the pressure drop across the baghouse used in conjunction with the the one (1) rotary kiln (ID K5), at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 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 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 violation of 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.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

D.2.10 Broken or Failed Bag or Scrubber Detection [40 CFR 64]

- (a) For a single compartment units controlling emissions from a process operated continuously, a failed unit and the associated process will 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 shutdown no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency provisions of this permit (Section B - Emergency Provisions).

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

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

D.2.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.3 and D.2.7, the Permittee shall maintain records in accordance with (1) through (4) below when burning coal. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Conditions D.2.3 and D.2.7.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual coal usage since last compliance determination period;
 - (3) Sulfur content, heat content, and ash content; and
 - (4) Sulfur dioxide emission rates.
- (b) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the NO_x and SO₂ emission limits established in Condition D.2.2.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual #4 fuel oil usage since last compliance determination period;
 - (3) Sulfur content and heat content,
 - (4) Sulfur dioxide emission rates; and
 - (5) Vendor analysis of #4 fuel oil and #4 fuel oil supplier certification.
- (c) Pursuant to 326 IAC 3-7-5(a), the owners or operators of sources with total coal-fired capacity greater than or equal one hundred (100) MMBtu per hour actual heat input 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.

- (d) To document compliance with Condition D.2.8, the Permittee shall maintain records of visible emission notations of the two (2) rotary kilns (IDs K3 and K4) wet scrubber stack (S/V ID ST4) and the one (1) rotary kiln (ID K5) baghouse stack (S/V ID ST 5) once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (e) To document compliance with Condition D.2.9, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY CONDITIONS

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

- (e) One (1) haydite crusher line, identified as HCR, constructed in 1962, with a maximum capacity of 100 tons of expanded shale per hour, using wet suppression of fugitive dust as control, exhausting fugitively, and consisting of the following equipment:
- (1) one (1) primary haydite crusher, identified as HCR1, with a maximum capacity of 100 tons of expanded shale per hour,
 - (2) one (1) secondary haydite crusher, identified as HCR2, with a maximum capacity of 100 tons of expanded shale per hour,
 - (3) three (3) screens, identified as HCR3 through HCR5, each with a maximum capacity of 100 tons of expanded shale per hour, and
 - (4) seven (7) conveyors, identified as HCR9 through HCR15, each with a maximum capacity of 100 tons of expanded shale per hour.

(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.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) primary haydite crusher (ID HCR1), one (1) secondary haydite crusher (ID HCR2), three (3) screens (ID HCR3 through HCR5) and seven (7) conveyors (ID HCR9 through HCR14) shall each not exceed 51.28 pounds per hour when operating at a process weight rate of 200,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

D.3.2 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 control devices.

Compliance Determination Requirements

D.3.3 Particulate Control

In order to comply with condition D.3.1, the water spray system for particulate control shall be in operation and control emissions from the haydite crusher line at all times that the haydite crusher line is in operation except when the ambient temperature is at or below the freezing point.

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

D.3.4 Visible Emissions Notations

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

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

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain once per day records of visible emission notations of the haydite crusher line stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY CONDITIONS

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

- (f) One (1) reciprocating grate clinker cooler, identified as CLNKCOOL, constructed in 1966, with a maximum capacity of 40 tons of expanded shale per hour, using a multiclone as control, and exhausting to stack ST2.

(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 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 42.53 pounds per hour when operating at a process weight rate of 80,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

D.4.2 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 this facility and its control device.

Compliance Determination Requirements

D.4.3 Particulate Control

In order to comply with condition D.4.1, the multiclone for particulate control shall be in operation and control emissions from the reciprocating grate clinker cooler at all times that the reciprocating grate clinker cooler is in operation.

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

D.4.4 Visible Emissions Notations

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

- (e) The 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 violation of this permit.

D.4.5 Parametric Monitoring

The Permittee shall record the pressure drop across the multiclone used in conjunction with the reciprocating grate clinker cooler, at least once per day when the reciprocating grate clinker cooler is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 3.0 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 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 violation of 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.4.6 Multiclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will 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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a violation of this permit.

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

D.4.7 Record Keeping Requirements

- (a) To document compliance with Condition D.4.4, the Permittee shall maintain once per day records of visible emission notations of the reciprocating grate clinker cooler stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.4.5, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY CONDITIONS

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

- (g) One (1) expanded shale aggregate crusher line, identified as ESA, constructed in 2000, with a maximum capacity of 30 tons of expanded shale per hour and consisting of the following equipment:
- (1) one (1) expanded shale aggregate crusher, identified as ESA 1, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6,
 - (2) one (1) screen, identified as ESA 2, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6, and
 - (3) five (5) conveyors, identified as ESA 3 through ESA 7, each with a maximum capacity of 30 tons of expanded shale per hour, utilizing a water spray system on the feed conveyor as particulate control and exhausting fugitively.

Under 40 CFR 60, Subpart OOO, these crushers, screens, and conveyors are affected facilities in a fixed nonmetallic mineral processing plant [40 CFR 60, Subpart OOO]

(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 PM Emission Limitations [326 IAC 2-2]

Pursuant to T109-6835-00007, issued February 2, 1999, the particulate matter emissions from the expanded shale aggregate crusher processes shall be limited as follows:

Process	Process ID	Stack ID	Emission Limitation (lb/hr)
Screening	ESA 2	ST6	0.42
Crushing	ESA 1	ST6	2.28
Conveying	ESA 3-7	NA	1.20

Compliance with these limits shall ensure that the emissions of PM are limited to 25 per twelve consecutive month period, respectively, rendering 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.5.2 PM10 Emission Limitations [326 IAC 2-2]

Pursuant to T109-6835-00007, issued February 2, 1999, the particulate matter less than 10 microns emissions from the following expanded shale aggregate crusher processes shall be limited as follows:

Process	Process ID	Stack ID	Emission Limitation (lb/hr)
Screening	ESA 2	ST6	0.42
Crushing	ESA 1	ST6	1.59
Conveying	ESA 3-7	NA	1.20

Compliance with these limits shall ensure that the emissions of PM-10 are limited to 15 tons per twelve consecutive month period, rendering 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.5.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) expanded shale aggregate crushing and screening facility which includes:

- (a) one (1) expanded shale aggregate crusher (ID ESA 1), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour),
- (b) one (1) screen (ID ESA 2), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour), and
- (c) five (5) conveyors (ID ESA 3 through ESA 7), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

D.5.4 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 this facility and its control devices.

Compliance Determination Requirements

D.5.5 Particulate Control

In order to comply with conditions D.5.1, D.5.2 and D.5.3:

- (a) The baghouses for particulate control shall be in operation and control emissions from the one (1) expanded shale aggregate crusher (ID ESA 1) and one (1) screen (ID ESA 2) at all times that the processes are in operation.
- (b) The water spray system for particulate control shall be in operation and control emissions from the five (5) conveyors (ID ESA 3 through ESA 7) at all times that the processes are in operation, except when the ambient temperature is at or below the freezing point or the shale already contains sufficient moisture.
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) In order to demonstrate compliance with Conditions D.5.1 and D.5.3, the Permittee shall perform PM testing on Stack ST6 within 90 days of startup of the unit, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) In order to demonstrate compliance with Condition D.5.2, the Permittee shall perform PM10 testing on Stack ST6 within 90 days of startup of the unit or within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8, 2008, whichever happens later. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensible PM.

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

D.5.7 Visible Emissions Notations

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

D.5.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the expanded shale aggregate crusher line, at least once per day when the expanded shale aggregate crusher line is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 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 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 violation of 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.5.9 Broken or Failed Bag Detection

- (a) For a single compartment units controlling emissions from a process operated continuously, a failed unit and the associated process will 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 shutdown no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency provisions of this permit (Section B - Emergency Provisions).

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

D.5.10 Record Keeping Requirements

- (a) To document compliance with Condition D.5.7, the Permittee shall maintain once per day records of visible emission notations of the expanded shale aggregate crusher line stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.5.8, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.1 FACILITY CONDITIONS

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

- (g) One (1) expanded shale aggregate crusher line, identified as ESA, constructed in 2000, with a maximum capacity of 30 tons of expanded shale per hour and consisting of the following equipment:
- (1) one (1) expanded shale aggregate crusher, identified as ESA 1, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6,
 - (2) one (1) screen, identified as ESA 2, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6, and
 - (3) five (5) conveyors, identified as ESA 3 through ESA 7, each with a maximum capacity of 30 tons of expanded shale per hour, utilizing a water spray system on the feed conveyor as particulate control and exhausting fugitively.

Under 40 CFR 60, Subpart OOO, these crushers, screens, and conveyors are affected facilities in a fixed nonmetallic mineral processing plant [40 CFR 60, Subpart OOO]

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

E.1.1 General Provisions Relating to NSPS Subpart OOO [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60 Subpart OOO, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, as specified in Table 1 of 40 CFR Part 60, Subpart OOO in accordance with schedule in 40 CFR 60 Subpart OOO.

E.1.2 Standards of Performance for Nonmetallic Mineral Processing Plants [40 CFR 60, Subpart OOO]

The emission units included in the expanded shale aggregate crusher line identified as ESA, that are involved in a fixed nonmetallic mineral processing operation, shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment A of this permit):

- (1) 40 CFR 60.670(a)(1), (f)
- (2) 40 CFR 60.671
- (2) 40 CFR 60.672(a)(1), (a)(2)
- (3) 40 CFR 60.672(b)
- (4) 40 CFR 60.672(c)
- (5) 40 CFR 60.673
- (6) 40 CFR 60.674
- (7) 40 CFR 60.675
- (8) 40 CFR 60.676

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Hydraulic Press Brick Company
Source Address: Centerton Road, Brooklyn, Indiana IN 46111
Mailing Address: P.O. Box 7, Brooklyn, IN 46111-0007
Part 70 Permit No.: T109-26822-00007

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Hydraulic Press Brick Company
Source Address: Centerton Road, Brooklyn, Indiana IN 46111
Mailing Address: P.O. Box 7, Brooklyn, IN 46111-0007
Part 70 Permit No.: T109-26822-00007

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Hydraulic Press Brick Company
Source Address: Centerton Road, Brooklyn, Indiana IN 46111
Mailing Address: P.O. Box 7, Brooklyn, IN 46111-0007
Part 70 Permit No.: T109-26822-00007
Facility: Rotary Kiln K4
Parameter: SO2 and NOx
Limit: The use of No. 4 fuel oil in rotary kiln K4 based on 0.5% sulfur content shall be limited to less than 0.99 million gallons per twelve (12) month consecutive period, with compliance determined at the end of each month.

QUARTER :

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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: Hydraulic Press Brick Company
 Source Address: Centerton Road, Brooklyn, Indiana IN 46111
 Mailing Address: P.O. Box 7, Brooklyn, IN 46111-0007
 Part 70 Permit No.: T109-26822-00007

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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

Indiana Department of Environmental Management Office of Air Quality

Source Name:	Hydraulic Press Brick Company
Source Location:	Centerton Road, Brooklyn, Indiana 46111
County:	Morgan
SIC Code:	3295
Permit Renewal No.:	109-26822-00007
Permit Reviewer:	Madhurima D. Moulik

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 74 FR 19309, Apr. 28, 2009, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).

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

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a nonmetallic mineral processing plant.

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

Crush or Crushing means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: Jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(1) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(2) Sand and Gravel.

(3) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

(6) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

(10) Boron, including Borax, Kernite, and Colemanite.

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

(18) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be "saturated" for purposes of this definition.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) of nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: Trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet material processing operation(s) means any of the following:

(1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or

(2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

§ 60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

(c) [Reserved]

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and

(2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.

(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

(d) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

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

- (i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.
- (ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g. , using a strip chart recorder or a data logger).
- (iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.
- (v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.
- (vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.
- (vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.
- (viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.
- (i) Installation of the bag leak detection system;
- (ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;
- (iii) Operation of the bag leak detection system, including quality assurance procedures;
- (iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;
- (v) How the bag leak detection system output will be recorded and stored; and
- (vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.
- (3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section,

the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

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

(ii) Sealing off defective bags or filter media;

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

(iv) Sealing off a defective fabric filter compartment;

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

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

(e) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:

(1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, Appendix A-4), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations shall be 1 hour (ten 6-minute averages).

(ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

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

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

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may

be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A-1 of this part [*i.e.*, velocity head <1.3 mm H₂O (0.05 in. H₂O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.*, from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \quad (\text{Eq. 1})$$

Where:

V_e= average building vent velocity (feet per minute);

Q_f= average fan flow rate (cubic feet per minute); and

A_e= area of building vent and measurement location (square feet).

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

(g) For performance tests involving only Method 9 (40 CFR part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.

(h) [Reserved]

(i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

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

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

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

(3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.

(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following

such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

(h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

(k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

Table 1 to Subpart 000—Exceptions to Applicability of Subpart A to Subpart

Subpart A reference	Applies to subpart 000	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart 000—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ^b	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

^bThe stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

Table 3 to Subpart 000—Fugitive Emission Limits

<p style="text-align: center;">For * * *</p>	<p style="text-align: center;">The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *</p>	<p style="text-align: center;">The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *</p>	<p style="text-align: center;">The owner or operator must demonstrate compliance with these limits by conducting * * *</p>
<p>Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008</p>	<p>10 percent opacity</p>	<p>15 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart.</p>
<p>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</p>	<p>7 percent opacity</p>	<p>12 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and</p>
			<p>A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.</p>

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

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

Source Name:	Hydraulic Press Brick Company
Source Location:	Centerton Road, Brooklyn, Indiana 46111
County:	Morgan
SIC Code:	3295
Permit Renewal No.:	T109-26822-00007
Permit Reviewer:	Madhurima D. Moulik

On June 3, 2009, the Office of Air Quality (OAQ) had a notice published in the Martinsville Daily Reporter, in Mooresville, Morgan County, stating that Hydraulic Press Brick Company had applied for a Part 70 Operating Permit renewal to operate a stationary shale processing plant producing lightweight expanded shale aggregate. The notice also stated that OAQ proposed to issue a Part 70 permit renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

After internal review, the OAQ has decided to make the change described below:

On April 28, 2009, EPA amended 40 CFR Part 60, Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants. Attachment A of the permit has been updated accordingly.

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

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

Source Background and Description

Source Name:	Hydraulic Press Brick Company
Source Location:	Centerton Road, Brooklyn, Indiana 46111
County:	Morgan
SIC Code:	3295
Permit Renewal No.:	109-26822-00007
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from the Hydraulic Press Brick Company relating to the operation of a stationary shale processing plant producing lightweight expanded shale aggregate.

History

On August 1, 2008, Hydraulic Press Brick Company submitted an application to the OAQ requesting to renew its operating permit. Hydraulic Press Brick Company was issued its first Part 70 Operating Permit Renewal on April 30, 2004.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) pre-kiln shale processing operation, identified as pre-kiln, constructed in 1954, with a maximum capacity of 200 tons of raw shale per hour, using wet suppression of fugitive dust as control, and exhausting fugitively, and consisting of the following equipment:
 - (1) one (1) primary crusher, identified as PK1, with a maximum capacity of 200 tons of raw shale per hour,
 - (2) one (1) secondary crusher, identified as PK2, with a maximum capacity of 100 tons of raw shale per hour,
 - (3) six (6) conveyors, identified as PK3 through PK8, each with a maximum capacity of 200 tons of raw shale per hour;
- (b) One (1) rotary kiln, identified as K3, constructed in 1959, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of 20 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4;
- (c) One (1) rotary kiln, identified as K4, constructed in 1962, with a maximum heat input of 100 million British Thermal Units (MMBtu) per hour burning No. 4 fuel oil, natural gas or bituminous coal, with a maximum capacity of 15 tons of raw shale per hour, using a Peabody wet scrubber as control, and exhausting to stack ST4;
- (d) One (1) rotary kiln, identified as K5, constructed in 1966, with a maximum heat input of 100 MMBtu per hour burning natural gas or bituminous coal, with a maximum capacity of 30 tons of raw shale per hour, using a cloth baghouse as control, and exhausting to stack ST5;

- (e) One (1) haydite crusher line, identified as HCR, constructed in 1962, with a maximum capacity of 100 tons of expanded shale per hour, using wet suppression of fugitive dust as control, exhausting fugitively, and consisting of the following equipment:
 - (1) one (1) primary haydite crusher, identified as HCR1, with a maximum capacity of 100 tons of expanded shale per hour,
 - (2) one (1) secondary haydite crusher, identified as HCR2, with a maximum capacity of 100 tons of expanded shale per hour,
 - (3) three (3) screens, identified as HCR3 through HCR5, each with a maximum capacity of 100 tons of expanded shale per hour, and
 - (4) seven (7) conveyors, identified as HCR9 through HCR15, each with a maximum capacity of 100 tons of expanded shale per hour;

- (f) One (1) reciprocating grate clinker cooler, identified as CLNKCOOL, constructed in 1966, with a maximum capacity of 40 tons of expanded shale per hour, using a multiclone as control, and exhausting to stack ST2; and

- (g) One (1) expanded shale aggregate crusher line, identified as ESA, constructed in 2000, with a maximum capacity of 30 tons of expanded shale per hour and consisting of the following equipment:
 - (1) one (1) expanded shale aggregate crusher, identified as ESA 1, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6,
 - (2) one (1) screen, identified as ESA 2, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6, and
 - (3) five (5) conveyors, identified as ESA 3 through ESA 7, each with a maximum capacity of 30 tons of expanded shale per hour, utilizing a water spray system on the feed conveyor as particulate control and exhausting fugitively.

Under 40 CFR 60, Subpart OOO, these crushers, screens, and conveyors are affected facilities in a fixed nonmetallic mineral processing plant.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source does not include any emission unit that was constructed and/or is operating without a permit.

Emission Units and Pollution Control Equipment Removed From the Source

No emission unit or pollution control equipment has been removed from this source since the issuance of Part 70 permit (first renewal) no. T109-17571-00007.

Insignificant Activities

- (a) Paved and unpaved roads and parking lots with public access; [326 IAC 6-4]

- (b) Other activities or categories not previously identified with emissions below insignificant thresholds: [326 IAC 6-4]
 - (1) One coal silo, identified as silo 6,
 - (2) One (1) coal unloading operation, with a maximum capacity of 280 tons of coal per hour, consisting of one (1) dump pit, one (1) hopper for coal unloading, and two (2) conveyors,

- (3) Four (4) covered silos, identified as silos 3, 4, 5A, and 5B, each with a maximum capacity of 200 tons of raw shale,
- (4) Three (3) hoppers, identified as HCR6 through HCR8, each with a maximum capacity of 100 tons of raw shale per hour,
- (5) Two (2) chutes, identified as HCR16 and HCR17, each with a maximum capacity of 100 tons of expanded shale per hour.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T109-17571-00007 on April 30, 2004, the source has not been issued any additional approvals.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

1. IDEM has determined that it is the Permittee's responsibility to include 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.

~~D.2.10 Baghouse and Scrubber Inspections~~

~~An inspection shall be performed each calendar quarter of all bags and scrubbers controlling the one (1) rotary kiln (ID K5) and the two (2) rotary kilns (IDs K3 and K4) operation when venting to the atmosphere. A baghouse or scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags and spray nozzles shall be replaced. Inspections required by this condition shall not be performed in consecutive months.~~

~~Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).~~

~~D.2.11 Broken or Failed Bag or Scrubber 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 violation of this permit. If operations continue after bag or scrubber 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.~~

2. For multi-compartment baghouses, the permit will no longer specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added as follows to Condition D.2.6 - Particulate Control 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.

D.2.6 Particulate Control

- (a) ...
 - (b) ...
 - (c) **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.**
3. The frequency of parametric monitoring, including visible emissions notations and pressure drop monitoring, has been changed from once per shift to once per day. In addition, the recordkeeping requirement for units subject to parametric monitoring requirements has been modified to require the Permittee to keep records of when records were not taken and the reason for the lack of records.
 4. The requirements under the NSPS for nonmetallic mineral processing plants (40 CFR 60, Subpart OOO) have been included in their entirety as attachment A to the permit. Therefore, NSPS conditions previously included in Section D.5 have been deleted. The applicable sections of the NSPS have been listed in Section E.1 of the permit.
 5. Condition D.2.5 has been modified to delete the initial testing deadlines for kilns identified as K3, K4, and K5, as the testing deadlines specified have passed. In addition, on July 15, 2008 the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM2.5) was effective. Pursuant to this rule revision, IDEM will continue to evaluate condensible PM for NSR permits and set limits for filterable and condensible PM10/PM2.5. However, IDEM will not require compliance demonstration until after the publication of a new or revised condensable test method (consistent with the "transition period" established by the U. S. EPA in this rulemaking).

The modified testing requirements are as follows:

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

- (a) In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM testing on the three (3) rotary kilns (K3, K4 and K5) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (b) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM10 testing on the three (3) rotary kilns (K3, K4 and K5) within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8, 2008. In the event that kiln K4 is not burning oil at the time revised condensible PM test method(s) are published, PM10 testing shall be performed within 180 days of burning oil in Kiln #4 after the date of publication of condensible PM test methods. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensible PM.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) In order to demonstrate compliance with Conditions D.5.1 and D.5.3, the Permittee shall perform PM testing on Stack ST6, utilizing Methods methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) In order to demonstrate compliance with Condition D.5.2, the Permittee shall perform PM10 testing on Stack ST6 within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensible PM.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A: pages 1 through 17 of this document for detailed emission calculations.

County Attainment Status

The source is located in Morgan County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph counties as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby counties as attainment for the 8-hour ozone standard.

- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. Morgan County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM2.5**
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Morgan County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15th 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.
- (c) **Other Criteria Pollutants**
 Morgan County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) **Fugitive Emissions**
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	greater than 250
PM ₁₀	greater than 250
PM _{2.5}	greater than 250
SO ₂	greater than 250
VOC	less than 250
CO	greater than 100, less than 250
NO _x	greater than 250

HAPs	tons/year
HCl	>10
Total	<25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, PM2.5, SO2, VOC, CO, and NOx are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

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

Potential to Emit After Issuance

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

Potential to Emit (tons per year)

Process/ Emission Unit	PM	PM₁₀	PM_{2.5}	SO₂	VOC	CO	NO_x
Pre-Kiln Shale Processing (PK1 - PK8)	2.69	1.39	1.39	--	--	--	--
Rotary Kilns (K3 - K5)	207.41	77.14	77.14	1,992.9	222.07	167.97	540.93
Haydite Crusher Line (HCR1-HCR5, HCR9 - HCR15)	7.24	7.24	7.24	--	--	--	--
Reciprocating Grate Clinker Cooler	71.83	28.03	28.03	--	--	--	--
Expanded Shale Aggregate Crusher Line (ESA1 - ESA7)	17.08	14.09	14.09	--	--	--	--
Coal Unloading	0.604	0.211	0.211	--	--	--	--
Unpaved Roads	1.48	1.48	1.48	--	--	--	--
Total	>250	<250	>100	>250	<250	>250	>250
Major Source Threshold	250	250	100	250	250	250	250

- (a) This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and is not one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is major for Nonattainment NSR because the emissions of the nonattainment pollutant, PM_{2.5}, are greater than one hundred (>100) tons per year.

- (c) **Fugitive Emissions**
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets 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 existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	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)
Kiln K3 - PM/PM10	Scrubber	Y	>100	<100	100	Y	N
Kiln K4 - PM/PM10	Scrubber	Y	>100	<100	100	Y	N
Kiln K5 - PM/PM10	Scrubber	Y	>100	<100	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Kilns K3, K4, and K5 for PM and PM-10 upon issuance of the Title V Renewal. The Permittee has submitted a CAM plan, and the details of the compliance monitoring requirements are included in the section titled "Compliance Determination and Monitoring Requirements".

- (b) The shale aggregate crushing and screening facility is subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO), which is incorporated by reference as 326 IAC 12. Only units that were constructed, reconstructed, or modified after August 31, 1983 are subject to the requirements of this subpart.

Nonapplicable portions of the NSPS will not be included in the permit. This expanded shale aggregate crushing and screening facility is subject to the following portions of Subpart OOO.

- (1) 40 CFR 60.670(a)(1), (f)
- (2) 40 CFR 60.671
- (2) 40 CFR 60.672(a)(1), (a)(2)
- (3) 40 CFR 60.672(b)
- (4) 40 CFR 60.672(c)
- (5) 40 CFR 60.673
- (6) 40 CFR 60.674
- (7) 40 CFR 60.675
- (8) 40 CFR 60.676

- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this shale processing plant.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 1-5-2 (Emergency Reduction Plans)

The source is subject to 326 IAC 1-5-2. The permittee prepared and submitted an emergency reduction plan (ERP) on May 2, 1999.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This source has potential to emit less than 250 tons per year each of VOC and PM-10, and less than 2,500 tons per year each of CO, NO_x, and SO₂. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted by July 1 beginning in 2004 and every 3 years after that. Therefore, the next emission statement for this source must be submitted by July 1, 2010. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) does not apply because the source is not located in a nonattainment area for particulate matter and there are no new sources of fugitive particulate matter emissions that had not received all the necessary preconstruction approvals before the 326 IAC 6-5 applicability date of December 13, 1985.

State Rule Applicability – Individual Facilities

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

This source was constructed before the applicability date for 326 IAC 2-4.1 (July 27, 1997), and has not been reconstructed after that date. Therefore, 326 IAC 2-4.1 does not apply.

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

- (1) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the following:
 - (a) the one (1) primary crusher and six (6) conveyors shall each not exceed 58.51 pounds per hour when each operating at a process weight rate of 400,000 pounds per hour.
 - (b) the one (1) secondary crusher shall not exceed 51.28 pounds per hour when operating at a process weight rate of 200,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

- (2) The one (1) rotary kiln (ID K3) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 40,000 pounds per hour of crushed shale (equivalent to 20 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

The wet scrubber shall be in operation at all times the one (1) rotary kiln (ID K3) is in operation, in order to comply with this limit.

- (3) The one (1) rotary kiln (ID K4) shall not exceed 25.16 pounds per hour when operating at a process weight rate of 30,000 pounds per hour of crushed shale (equivalent to 15 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

The wet scrubber shall be in operation at all times the one (1) rotary kiln (ID K4) is in operation, in order to comply with this limit.

- (4) The one (1) rotary kiln (ID K5) shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of crushed shale (equivalent to 30 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

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

The baghouse shall be in operation at all times the rotary kiln (ID K5) is in operation, in order to comply with this limit.

- (5) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) primary haydite crusher (ID HCR1), one (1) secondary haydite crusher (ID HCR2), three (3) screens (ID HCR3 through HCR5) and seven (7) conveyors (ID HCR9 through HCR14) shall each not exceed 51.28 pounds per hour when operating at a process weight rate of 200,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

- (6) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 42.53 pounds per hour when operating at a process weight rate of 80,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

- (7) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) expanded shale aggregate crushing and screening facility which includes:

- (a) one (1) expanded shale aggregate crusher (ID ESA 1), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour),
- (b) one (1) screen (ID ESA 2), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour), and
- (c) five (5) conveyors (ID ESA 3 through ESA 7), shall not exceed 40.04 pounds per hour when operating at a process weight rate of 60,000 pounds per hour of expanded shale (equivalent to 30 tons per hour).

The pounds per hour limitation was calculated with the following equation:

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

$$E = 4.10 P^{0.67}$$

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

The water spray system for the five (5) conveyors shall be in operation at all times on the shale except when the ambient temperature is at or below the freezing point or the shale already contains sufficient moisture. The baghouses shall be in operation at all times the expanded shale aggregate crusher and the screen are in operation, in order to comply with this limit.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

The sulfur dioxide emissions from the rotary kilns K3, K4, and K5 when burning coal shall be limited to 6.0 pounds per million BTU of heat input from coal.

The sulfur dioxide emissions from the one (1) rotary kiln K4 when burning No. 4 fuel oil shall be limited to 1.6 pounds per mmBTU of heat input from No.4 fuel oil.

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 Monitoring Requirements applicable to the pre-kiln shale processing operation are as follows:

D.1.4 Visible Emissions Notations

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

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response 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 of this permit.

The Compliance Monitoring Requirements applicable to kilns K3, K4, and K5 are as follows:

D.2.8 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the two (2) rotary kilns (IDs K3 and K4) wet scrubber stack (S/V ID ST4) and the one (1) rotary kiln (ID K5) baghouse stack (S/V ID ST 5) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The 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 violation of this permit.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

D.2.9 Parametric Monitoring [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the wet scrubber used in conjunction with the two (2) rotary kilns (IDs K3 and K4), at least once per day when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet scrubber is outside the normal range of 8.0 inches of water and above, and the flow rate for scrubbing liquid is outside the range of 100 gallons per minute or above, 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 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 violation of 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.

- (b) The Permittee shall record the pressure drop across the baghouse used in conjunction with the the one (1) rotary kiln (ID K5), at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 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 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 violation of 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.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

D.2.10 Broken or Failed Bag or Scrubber Detection [40 CFR 64]

- (a) For a single compartment units controlling emissions from a process operated continuously, a failed unit and the associated process will 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 shutdown no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency provisions of this permit (Section B - Emergency Provisions).

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the three rotary kilns (K3, K4 and K5).

These monitoring conditions are necessary because the baghouse for the one (1) rotary kiln (K5) and the scrubber for the two (2) rotary kilns (K3 and K4) must operate properly to ensure compliance with 326 IAC 6-3-2 and 326 IAC 2-7.

The Compliance Monitoring Requirements applicable to the haydite crusher line are as follows:

D.3.4 Visible Emissions Notations

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

This monitoring condition is necessary because the wet suppression system for the one (1) haydite crusher line must operate properly to ensure compliance with 40 CFR 64 (CAM), 326 IAC 6-3-2, 326 IAC 6-4, and 326 IAC 2-7.

The Compliance Monitoring Requirements applicable to reciprocating grate clinker cooler are as follows:

D.4.4 Visible Emissions Notations

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

D.4.5 Parametric Monitoring

The Permittee shall record the pressure drop across the multiclone used in conjunction with the reciprocating grate clinker cooler, at least once per day when the reciprocating grate clinker cooler is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 3.0 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 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 violation of this permit.

D.4.6 Multiclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will 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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a violation of this permit.

These monitoring conditions are necessary because the multiclone for the one (1) reciprocating grate clinker cooler operation must operate properly to ensure compliance with 326 IAC 6-3-2 and 326 IAC 2-7.

The Compliance Monitoring Requirements applicable to the shale aggregate crusher line are as follows:

D.5.7 Visible Emissions Notations

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

D.5.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the expanded shale aggregate crusher line, at least once per day when the expanded shale aggregate crusher line is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 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 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 violation of this permit.

D.5.10 Broken or Failed Bag Detection

- (a) For a single compartment units controlling emissions from a process operated continuously, a failed unit and the associated process will 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 shutdown no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring requirements are necessary because the wet suppression system for the five (5) conveyors (ESA 3 through ESA 7) and the baghouses for the one (1) expanded shale aggregate crusher (ESA 1) and one (1) screen (ESA 2) must operate properly to ensure compliance with 40 CFR 64 (CAM), 326 IAC 6-3-2, 326 IAC 6-4, and 326 IAC 2-7.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Second Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on August 1, 2008.

Conclusion

The operation of this shale processing plant shall be subject to the conditions of the attached Part 70 Operating Permit Second Renewal No. T109-26822-00007.

Total Source Emissions Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 22-Oct-08

Uncontrolled Emissions (tons/year)

Emissions Generating Activity

Pollutant	Emissions								TOTAL Emissions tons per year
	from Prekiln, Unpaved Roads Haydite and ESA Crushers, Clinker Cooler, Coal Unloading tons per year	Kiln 3 Coal Emissions tons per year	Kiln 3 Gas* Emissions tons per year	Kiln 4 Coal Emissions tons per year	Kiln 4 #4 Fuel Oil Emissions tons per year	Kiln 4 Gas* Emissions tons per year	Kiln 5 Coal Emissions tons per year	Kiln 5 Gas* Emissions tons per year	
PM	1,331.45	20,349.48	N/A	15,262.11	N/A	N/A	29,354.76	N/A	66,297.80
PM10	972.99	7,568.64	N/A	5,676.48	N/A	N/A	10,919.34	N/A	25,137.45
SO2	0.00	297.84	N/A	223.38	N/A	N/A	1,471.68	N/A	1,992.90
NOx	0.00	166.44	N/A	124.83	N/A	N/A	249.66	N/A	540.93
VOC	0.00	68.33	N/A	51.25	N/A	N/A	102.49	N/A	222.07
CO	0.00	51.68	N/A	38.76	N/A	N/A	77.53	N/A	167.97
total HAPs	0.00	0.00	N/A	0.00	N/A	N/A	0.00	N/A	0.00
worst case single HAP	0.00	0.00	N/A	0.00	N/A	N/A	0.00	N/A	0.00

Controlled Emissions (tons/year)

Emissions Generating Activity

Pollutant	Emissions								TOTAL Emissions tons per year
	from Prekiln, Unpaved Roads Haydite and ESA Crushers, Clinker Cooler, Coal Unloading tons per year	Kiln 3 Coal Emissions tons per year	Kiln 3 Gas* Emissions tons per year	Kiln 4 Coal Emissions tons per year	Kiln 4 #4 Fuel Oil Emissions tons per year	Kiln 4 Gas* Emissions tons per year	Kiln 5 Coal Emissions tons per year	Kiln 5 Gas* Emissions tons per year	
PM	100.93	101.75	N/A	76.31	N/A	N/A	29.35	N/A	308.34
PM10	52.44	37.84	N/A	28.38	N/A	N/A	10.92	N/A	129.58
SO2	0.00	297.84	N/A	223.38	N/A	N/A	1,471.68	N/A	1,992.90
NOx	0.00	166.44	N/A	124.83	N/A	N/A	249.66	N/A	540.93
VOC	0.00	68.33	N/A	51.25	N/A	N/A	102.49	N/A	222.07
CO	0.00	51.68	N/A	38.76	N/A	N/A	77.53	N/A	167.97
total HAPs	0.00	0.00	N/A	0.00	N/A	N/A	0.00	N/A	0.00
worst case single HAP	0.00	0.00	N/A	0.00	N/A	N/A	0.00	N/A	0.00

Methodology:

Total emissions based on rated capacity at 8,760 hours/year, before control.

*Worst case emissions are used for the three (3) kilns (ID K3, K4, K5). Worst case emissions for all 3 kilns are from coal.

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 22-Oct-03

** emissions before controls **

Unit Identification	No. of units						
				** see page 3 **		0.00 tons/yr	AP-42 Ch.11.2.3
				** see page 4 **		1.48 tons/yr	AP-42 Ch.11.2.1
						1.40 tons/yr	AP-42 Ch.11.2.3
PK1	1	200 ton/hr x	0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr	AP-42 Ch.11.19.2-2
PK2	1	200 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr	AP-42 Ch.11.19.2-2
HCR1	1	100 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.31 tons/yr	AP-42 Ch.11.19.2-2
HCR2	1	100 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.31 tons/yr	AP-42 Ch.11.19.2-2
CLNKCOOL	1	40 ton/hr x	0.41 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	71.83 tons/yr	AP-42 Ch.11.20
PK3-PK8	6	200 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	1.23 tons/yr	AP-42 Ch.11.19.2-2
HCR9-HCR15	7	100 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr	AP-42 Ch.11.19.2-2
HCR3-HCR5	3	100 ton/hr x	0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	6.57 tons/yr	AP-42 Ch.11.19.2-2
Total emissions before controls:						84.96 tons/yr	

Unit Identification						
		0.00 tons/yr x	100% emitted after controls =			0.00 tons/yr
		1.48 tons/yr x	100% emitted after controls =			1.48 tons/yr
		1.40 tons/yr x	100% emitted after controls =			1.40 tons/yr
PK1		0.61 tons/yr x	5% emitted after controls =			0.03 tons/yr
PK2		0.61 tons/yr x	5% emitted after controls =			0.03 tons/yr
HCR1		0.31 tons/yr x	10% emitted after controls =			0.03 tons/yr
HCR2		0.31 tons/yr x	10% emitted after controls =			0.03 tons/yr
CLNKCOOL		71.83 tons/yr x	100% emitted after controls =			71.83 tons/yr
PK3-PK8		1.23 tons/yr x	100% emitted after controls =			1.23 tons/yr
HCR9-HCR15		0.61 tons/yr x	100% emitted after controls =			0.61 tons/yr
HCR3-HCR5		6.57 tons/yr x	100% emitted after controls =			6.57 tons/yr
Total emissions after controls:						76.06 tons/yr

** fugitive vs. nonfugitive **

Unit Identification				
	Storage	0.00 tons/yr x	100% emitted after controls =	0.00 tons/yr
	Transporting	1.48 tons/yr x	100% emitted after controls =	1.48 tons/yr
	Loading and Unloading	1.23 tons/yr x	100% emitted after controls =	1.23 tons/yr
	Total fugitive emissions:			2.71 tons/yr
PK1	Crushing (primary)	0.61 tons/yr x	5% emitted after controls =	0.03 tons/yr
PK2	Crushing (secondary)	0.61 tons/yr x	5% emitted after controls =	0.03 tons/yr
HCR1	Crushing (primary)	0.31 tons/yr x	10% emitted after controls =	0.03 tons/yr
HCR2	Crushing (secondary)	0.31 tons/yr x	10% emitted after controls =	0.03 tons/yr
CLNKCOOL	Clinker Cooler	71.83 tons/yr x	100% emitted after controls =	71.83 tons/yr
PK3-PK8	Conveyor Transfer	1.23 tons/yr x	5% emitted after controls =	0.06 tons/yr
HCR9-HCR15	Conveyor Transfer	0.61 tons/yr x	10% emitted after controls =	0.06 tons/yr
HCR3-HCR5	Screening	6.57 tons/yr x	10% emitted after controls =	0.66 tons/yr
	Total nonfugitive emissions:			72.73 tons/yr

** storage **

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5)^{1.5} \cdot (365-p)/235 \cdot (f/15)$$

= 1.85 lb/acre/day

where s = 1.6 % silt content of material

p = 125 days of rain greater than or equal to 0.01 inches

f = 15 % of wind greater than or equal to 12 mph

$$E_p(\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

= 0.00 tons/yr

where sc = 0 tons storage capacity

** unpaved roads **

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

4	trip/hr x	
0.0757575	mile/trip x	
2	(round trip) x	
8760	hr/yr =	5309.0856 miles per year

$$E_f = k \cdot 5.9 \cdot (s/12)^2 \cdot (S/30) \cdot (W/3)^{0.7} \cdot (w/4)^{0.5} \cdot ((365-p)/365)$$

$$= 0.56 \text{ lb/mile}$$

where k = 0.8 ze multiplier
 s = 4.8 % silt content of unpaved roads
 p = 125 days of rain greater than or equal to 0.01 inches
 S = 5 miles/hr vehicle speed
 W = 9 tons average vehicle weight
 w = 6 wheels

$$0.56 \text{ lb/mi} \times 5,309.09 \text{ mi/yr} = 1.48 \text{ tons/yr}$$

$$2000 \text{ lb/ton}$$

** aggregate handling **

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 11.2.3.

$$E_f = k \cdot (0.0032) \cdot (U/5)^{1.3} \cdot (M/2)^{1.4}$$

$$= 0.0016 \text{ lb/ton}$$

where k = 0.74 (particle size multiplier)
 U = 10 mile/hr mean wind speed
 M = 5 % material moisture content

Methodology:

Haydite Crusher 1 and 2: Emission and control factors based on AP-42 11.19.2-2.

Prekiln: Emission and control factors based on AP-42 11.19.2-2.

Clinker Cooler: AP-42, Sec. 11.20 provides emission factors of 0.30 lb PM/ton feed and 0.12 lb PM10/ton feed for clinker cooler with multiclone controls. These have been adjusted by the applicant to 0.41 lb PM/ton finished product and 0.16 PM10/ton finished product, based upon the expected ratio of finished product to feed.

Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs

*Total emissions based on rated capacity at 8,760 hours/year, with multiclone control efficiency included in the emission factor.

Appendix A: Emission Calculations for PM-10

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 22-Oct-08

** emissions before controls **

Unit Identification	No. of units						
		Storage		** see page 3 **		0.00 tons/yr	AP-42 Ch.11.2.3
		Transporting		** see page 4 **		1.48 tons/yr	AP-42 Ch.11.2.1
	1	Unloading PM-10	200 ton/hr x	0.000016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.01 tons/yr
	1	Loading PM-10	200 ton/hr x	0.0001 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.09 tons/yr
PK1	1	Crushing (primary)	200 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr
PK2	1	Crushing (secondary)	200 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr
HCR1	1	Crushing (primary)	100 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.31 tons/yr
HCR2	1	Crushing (secondary)	100 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.31 tons/yr
CLNKCOOL	1	Clinker Cooler PM-10	40 ton/hr x	0.16 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	28.03 tons/yr
PK3-PK8	6	Conveyor Transfer PM	200 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	1.23 tons/yr
HCR9-HCR15	8	Conveyor Transfer PM	100 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.61 tons/yr
HCR3-HCR5	3	Screening PM-10	100 ton/hr x	0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	6.57 tons/yr
		Total emissions before controls:					39.86 tons/yr

Unit Identification				
		Storage	0.00 tons/yr x	100% emitted after controls =
		Transporting	1.48 tons/yr x	100% emitted after controls =
		Unloading PM-10	0.01 tons/yr x	100% emitted after controls =
		Loading PM-10	0.09 tons/yr x	100% emitted after controls =
PK1		Crushing (primary)	0.61 tons/yr x	5% emitted after controls =
PK2		Crushing (secondary)	0.61 tons/yr x	5% emitted after controls =
HCR1		Crushing (primary)	0.31 tons/yr x	10% emitted after controls =
HCR2		Crushing (secondary)	0.31 tons/yr x	10% emitted after controls =
CLNKCOOL		Clinker Cooler PM-10	28.03 tons/yr x	100% emitted after controls =
PK6-PK8		Conveyor Transfer PM-10	1.23 tons/yr x	100% emitted after controls =
HCR9-HCR14		Conveyor Transfer PM-10	0.61 tons/yr x	100% emitted after controls =
HCR3-HCR5		Screening PM-10	6.57 tons/yr x	100% emitted after controls =
		Total emissions after controls:		30.96 tons/yr

** fugitive vs. nonfugitive **

Unit Identification				
	Transporting	1.48 tons/yr x	100% emitted after controls =	1.48 tons/yr
	Unloading PM-10	1.23 tons/yr x	100% emitted after controls =	1.23 tons/yr
	Loading PM-10	0.61 tons/yr x	100% emitted after controls =	0.61 tons/yr
	Total fugitive emissions:			2.71 tons/yr
PK1	Crushing (primary)	0.61 tons/yr x	5% emitted after controls =	0.03 tons/yr
PK2	Crushing (secondary)	0.61 tons/yr x	5% emitted after controls =	0.03 tons/yr
HCR1	Crushing (primary)	0.31 tons/yr x	10% emitted after controls =	0.03 tons/yr
HCR2	Crushing (secondary)	0.31 tons/yr x	10% emitted after controls =	0.03 tons/yr
CLNKCOOL	Clinker Cooler PM-10	28.03 tons/yr x	100% emitted after controls =	28.03 tons/yr
PK6-PK8	Conveyor Transfer PM-10	1.23 tons/yr x	5% emitted after controls =	0.06 tons/yr
HCR9-HCR14	Conveyor Transfer PM-10	0.61 tons/yr x	10% emitted after controls =	0.06 tons/yr
HCR3-HCR5	Screening PM-10	6.57 tons/yr x	10% emitted after controls =	0.66 tons/yr
	Total nonfugitive emissions:			28.93 tons/yr

** unpaved roads **

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

4	trip/hr x		
0.075758	mile/trip x		
2	(round trip) x		
8760	hr/yr =	5309.086 miles per year	

$$E_f = k * 5.9 * (s/12) * (S/30) * (W/3)^{0.7} * (w/4)^{0.5} * ((365-p)/365)$$

= 0.56 lb/mile

where k = 0.8 (Particle size multiplier)

s = 4.8 % silt content of unpaved roads

p = 125 days of rain greater than or equal to 0.01 inches

S = 5 miles/hr vehicle speed

W = 9 tons average vehicle weight

w = 6 wheels

0.56 lb/mi x	5,309.09 mi/yr =	1.48 tons/yr
	2000 lb/ton	

** aggregate handling **

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 11.2.3.

$$E_f = k * (0.0032) * (U/5)^{1.3} / (M/2)^{1.4}$$

= 0.0016 lb/ton

where k = 0.74 (particle size multiplier)

U = 10 mile/hr mean wind speed

M = 5 % material moisture content

Methodology:

Haydite Crusher 1 and 2: Emission and control factors based on AP-42 11.19.2-2.

Prekiln: Emission and control factors based on AP-42 11.19.2-2.

Clinker Cooler: AP-42, Sec. 11.20 provides emission factors of 0.30 lb PM/ton feed and 0.12 lb PM10/ton feed for clinker cooler with multiclone controls. These have been adjusted by the applicant to 0.41 lb PM/ton finished product and 0.16 PM10/ton finished product, based upon the expected ratio of finished product to feed.

Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs

*Total emissions based on rated capacity at 8,760 hours/year, with multiclone control efficiency included in the emission factor.

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: 109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

SCC# 3-05-003-08
 expanded shale aggregate screening

TYPE OF MATERIAL	Throughput		Control Device: Baghouse (and moisture from water spray system on feed conveyor)				
	LBS/HR	TON/HR	Control Efficiency: 99.00%				
Shale	60000	30					
	PM	PM10	SOx	NOx	VOC	CO	Lead
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged
	1.4	1.4	0.00	0.00	0.00	0.00	0.00
Potential Uncontrolled Emissions lbs/hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/yea	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potential Controlled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	0.00	0.00	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (AIRS), March 1990.

SCC# 3-05-003-02
 expanded shale aggregate crushing

TYPE OF MATERIAL	Throughput		Control Device: Baghouse (and moisture from water spray system on feed conveyor)				
	LBS/HR	TON/HR	Control Efficiency: 99.00%				
Shale	60000	30					
	PM	PM10	SOx	NOx	VOC	CO	Lead
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged
	7.6	5.32	0.00	0.00	0.00	0.00	0.00
Potential Uncontrolled Emissions lbs/hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/yea	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potential Controlled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	0.00	0.00	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (AIRS), March 1990.

Hydraulic Press Brick Company
 Centerton Road, Brooklyn, IN, 46111

SCC# 3-05-009-05
 expanded shale aggregate transfer/conveying

TYPE OF MATERIAL	Throughput		Control Device: Water Spray System on feed conveyor				
	LBS/HR	TON/HR	Control Efficiency: 90.00%				
Shale	60000	30					
	PM	PM10	SOx	NOx	VOC	CO	Lead
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged
	0.4	0.4	0.00	0.00	0.00	0.00	0.00
Potential Uncontrolled Emissions lbs/hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/yea	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potential Controlled Emissions lbs/day	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	0.00	0.00	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (AIRS), March 1990.

Totals (uncontrolled)	0.00	0.00	0	0	0	0	0
Totals (controlled)	0.00	0.00	0	0	0	0	0

Kiln 3 Emissions from Bituminous Coal Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

Uncontrolled Emissions (tons/year)

Maximum rate tons/hr **20**
 Maximum rate tons/year **175,200.00**

Pollutant	Emissions Generating Activity		TOTAL Emissions tons per year
	Emissions from Kiln pounds per ton		
PM	232.30		20,349.48
PM10	86.40		7,568.64
SO2	3.40		297.84
NOx	1.90		166.44
VOC	0.78		68.33
CO	0.59		51.68
total HAPs	0.00		0.00
worst case single HAP	0.00		0.00

Controlled Emissions (tons/year)

Maximum rate tons/hr **20**
 Maximum rate tons/year **175,200.00**

Pollutant	Emissions Generating Activity		Control Efficiency of wet scrubber	TOTAL Emissions tons per year
	Emissions from Kiln pounds per ton			
PM	232.30	99.50%	101.75	
PM10	86.40	99.50%	37.84	
SO2	3.40	0.00%	297.84	
NOx	1.90	0.00%	166.44	
VOC	0.78	0.00%	68.33	
CO	0.59	0.00%	51.68	
total HAPs	0.00	0.00%	0.00	
worst case single HAP	0.00	0.00%	0.00	

Methodology:

PM factor based on stack test data (before controls, with emission factor for pulverized coal added) submitted by the applicant.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.
 Sulfur dioxide emission factors from AP-42, 11.20-4 (emission factors for lightweight aggregate production).
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.

Kiln 3 Emissions from Natural Gas Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

Without VOC and CO control

Uncontrolled Emissions (tons/year)

Maximum rate tons/hr **20**
 Maximum rate tons/year **175,200.00**

Pollutant	Emissions Generating Activity	
	Emissions from Kiln pounds per ton	Emissions tons per year
PM	214.30	18,772.68
PM10	79.70	6,981.72
SO2	0.23	20.15
NOx	0.89	77.96
VOC	0.04	3.50
CO	0.34	29.78
total HAPs	0.00	0.00
worst case single HAP	0.00	0.00

Controlled Emissions (tons/year)

Maximum rate tons/hr **20**
 Maximum rate tons/year **175,200.00**

Pollutant	Emissions Generating Activity		Control Efficiency of wet scrubber	TOTAL Emissions tons per year
	Emissions from Kiln pounds per ton			
PM	214.30	0.995	93.86	
PM10	79.70	0.995	34.91	
SO2	0.23	0	20.15	
NOx	0.89	0	77.96	
VOC	0.04	0	3.50	
CO	0.34	0	29.78	
total HAPs	0.00	0	0.00	
worst case single HAP	0.00	0	0.00	

Methodology:

PM, NOx, VOC, and CO factors from test data (before control for natural gas kiln (before control for natural gas kiln (with emission factor for pulverized coal added)) submitted by the applicant.
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.

Kiln 4 Emissions from Bituminous Coal Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

	Uncontrolled Emissions (tons/year)	
Maximum rate tons/hr	15	
Maximum rate tons/year	131,400.00	
	Emissions Generating Activity	
Pollutant	Emissions from Kiln pounds per ton	TOTAL Emissions tons per year
PM	232.30	15,262.11
PM10	86.40	5,676.48
SO2	3.40	223.38
NOx	1.90	124.83
VOC	0.78	51.25
CO	0.59	38.76
total HAPs	0.00	0.00
worst case single HAP	0.00	0.00

	Controlled Emissions (tons/year)		
Maximum rate tons/hr	15		
Maximum rate tons/year	131,400.00		
	Emissions Generating Activity		
Pollutant	Emissions from Kiln pounds per ton	Control Efficiency of wet scrubber	TOTAL Emissions tons per year
PM	232.30	99.50%	76.31
PM10	86.40	99.50%	28.38
SO2	3.40	0.00%	223.38
NOx	1.90	0.00%	124.83
VOC	0.78	0.00%	51.25
CO	0.59	0.00%	38.76
total HAPs	0.00	0.00%	0.00
worst case single HAP	0.00	0.00%	0.00

Methodology:
 PM factor based on stack test data (before controls, with emission factor for pulverized coal added) submitted by the applicant.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.
 Sulfur dioxide emission factors from AP-42, 11.20-4 (emission factors for lightweight aggregate production).
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.

Kiln 4 Emissions from Natural Gas Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

Uncontrolled Emissions (tons/year)		
Maximum rate tons/hr	15	
Maximum rate tons/year	131,400.00	
	Emissions Generating Activity	
Pollutant	Emissions from Kiln	TOTAL
	pounds per ton	tons per year
PM	214.30	14,079.51
PM10	79.70	5,236.29
SO2	0.23	15.11
NOx	0.89	58.47
VOC	0.04	2.63
CO	0.34	22.34
total HAPs	0.00	0.00
worst case single HAP	0.00	0.00

Controlled Emissions (tons/year)			
Maximum rate tons/hr	15		
Maximum rate tons/year	131,400.00		
	Emissions Generating Activity		
Pollutant	Emissions from Kiln	Control Efficiency of wet scrubber	TOTAL
	pounds per ton		Emissions tons per year
PM	214.30	99.50%	70.40
PM10	79.70	99.50%	26.18
SO2	0.23	0.00%	15.11
NOx	0.89	0.00%	58.47
VOC	0.04	0.00%	2.63
CO	0.34	0.00%	22.34
total HAPs	0.00	0.00%	0.00
worst case single HAP	0.00	0.00%	0.00

Methodology:

PM, NOx, VOC, and CO factors from test data (before control for natural gas kiln (before control for natural gas kiln (with emission factor for pulverized coal added)) submitted by the applicant.
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.

**Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors
#4 Fuel Oil**

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: 109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Mouluk
Date: 17-Oct-08

Heat Input Capacity mmBtu/hr	Potential Throughput kgals/year		S = Weight % Sulfur 1.6			
100.00	5,840.00					
Emission Factor in lb/kgal	PM 7	PM10 7	SO2 240	Pollutant NOx 47.0	VOC 1.04	CO 5.0
Potential Emission in tons/yr	20.44	20.44	700.80	137.24	3.04	14.60

Heat Input Capacity MMBtu/hr	Fuel Usage Limitation	Potential Throughput kgals/year	S = Weight % Sulfur 1.6			
100.00	94.43%	325.00				
Emission Factor in lb/kgal	PM* 0.0	PM10* 0.0	SO2 240.0	Pollutant NOx 47.0	VOC 1.0	CO 5.0
Potential Emission in tons/yr	0.01	0.01	39.00	7.64	0.17	0.81

Methodology

1 gallon of #4 Fuel oil has a heating value of 150,000 Btu
 Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.150 MMBtu
 Emission Factors are from AP 42 Tables 1.3-1 and 1.3-2.
 PM and PM10 emissions controlled with a wet scrubber with 99.5% efficiency.
 Emission (tons/yr) = Throughput (kgals/year) x Emission Factor (lb/kgal)/2,000 lb/ton

Kiln 5 Emissions from Bituminous Coal Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centeron Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

Uncontrolled Emissions (tons/year)		
Maximum rate tons/hr	30	
Maximum rate tons/year	262,800.00	
	Emissions Generating Activity	
Pollutant	Emissions from Kiln	TOTAL Emissions
	pounds per ton	tons per year
PM	223.40	29,354.76
PM10	83.10	10,919.34
SO2	11.20	1,471.68
NOx	1.90	249.66
VOC	0.78	102.49
CO	0.59	77.53
total HAPs	0.00	0.00
worst case single HAP	0.00	0.00

Controlled Emissions (tons/year)			
Maximum rate tons/hr	30		
Maximum rate tons/year	262,800.00		
	Emissions Generating Activity		
Pollutant	Emissions from Kiln	Control Efficiency of baghouse	TOTAL Emissions
	pounds per ton		tons per year
PM	223.40	99.90%	29.35
PM10	83.10	99.90%	10.92
SO2	11.20	0.00%	1,471.68
NOx	1.90	0.00%	249.66
VOC	0.78	0.00%	102.49
CO	0.59	0.00%	77.53
total HAPs	0.00	0.00%	0.00
worst case single HAP	0.00	0.00%	0.00

Methodology:

PM, SO2, NOx, VOC, and CO factors from test data (before control for natural gas kiln (before control for natural gas kiln (with emission factor for pulverized coal added)) submitted by the applicant.
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year * 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.

Kiln 5 Emissions from Natural Gas Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Plt ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

Uncontrolled Emissions (tons/year)

Maximum rate tons/hr **30**
 Maximum rate tons/year **262,800.00**

Pollutant	Emissions Generating Activity	
	Emissions from Kiln	TOTAL
	pounds per ton	tons per year
PM	214.30	28,159.02
PM10	79.70	10,472.58
SO2	1.80	236.52
NOx	0.89	116.95
VOC	0.04	5.26
CO	0.34	44.68
total HAPs	0.00	0.00
worst case single HAP	0.00	0.00

Controlled Emissions (tons/year)

Maximum rate tons/hr **30**
 Maximum rate tons/year **262,800.00**

Pollutant	Emissions Generating Activity		TOTAL
	Emissions from Kiln	Control Efficiency	
	pounds per ton		tons per year
PM	214.30	99.90%	28.16
PM10	79.70	99.90%	10.47
SO2	1.80	0.00%	236.52
NOx	0.89	0.00%	116.95
VOC	0.04	0.00%	5.26
CO	0.34	0.00%	44.68
total HAPs	0.00	0.00%	0.00
worst case single HAP	0.00	0.00%	0.00

Methodology:

PM, SO2, NOx, VOC, and CO factors from test data (before controls) submitted by the applicant
 Total Emissions in tons/year = average emissions in lb/ton * maximum rate tons/year* 1 ton/2000lbs
 Total emissions based on rated capacity at 8,760 hours/year, before control.
 Ratio of PM:PM10 based on AP-42 Sec. 11.20 ratios. Other factors from AP-42.

Particulate Emission Calculations

Company Name: Hydraulic Press Brick Company
Address City IN Zip: Centerton Road, Brooklyn, IN 46111
Part 70 Permit No.: T109-26822
Pit ID: 109-00007
Reviewer: Madhurima D. Moulik
Date: 27-Oct-08

One (1) coal unloading operation, with a maximum capacity of 280 tons of coal per hour, consisting of one (1) dump pit, one (1) hopper for coal unloading, and two (2) conveyors. The maximum coal usage is 119,455 tons per year, or 13.64 tons per hour. Therefore, potential emissions for the coal operation were based on a maximum capacity of 119,455 tons of coal per year because of bottlenecking.

Potential emissions were calculated using AP-42, Section 13.2.4 for Aggregate Handling and Storage Piles based on the following formula:

$$E = k(0.0032) * (U/5)^{1.3} / (M/2)^{1.4}$$

where E = emission factor, pound per ton (lb/ton)

k = particulate size multiplier (dimensionless) This value is 1.0 for total particulate matter and 0.35 for particulate matter less than 10

U = mean wind speed, miles per hour (mph), (assumed to be 10 mph)

M = material moisture content (%), (This value is assumed to be 4.5 based on typical moisture content data provided in Table 13.2.4-1 of AP-42)

Uncontrolled Potential to Emit:

PM $E = 1.0 * (0.0032) * [((10/5)^{1.3}) / (4.5/2)^{1.4}] = 0.00253 \text{ lb/ton}$
 $0.00253 * 119,455 * 4(\text{transfer points}) / 2000 = 0.604 \text{ ton/yr}$

PM10 $E = 0.35 * (0.0032) * [((10/5)^{1.3}) / (4.5/2)^{1.4}] = 0.00886 \text{ lb/ton}$
 $0.00886 * 119,455 * 4(\text{transfer points}) / 2000 = 0.211 \text{ ton/yr}$



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 23, 2009

RE: Hydraulic Press Brick Company / 109-26822-00007

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08



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

TO: Mark Thacker
Hydraulic Press Brick Company
PO Box 130
Brooklyn, IN 46111

DATE: July 23, 2009

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

SUBJECT: Final Decision
Part 70 Operating Permit Renewal
109-26822-00007

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

July 23, 2009

TO: Morgan County Public Library

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

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

Applicant Name: Hyraulic Press Brick Co.
Permit Number: 109-26822-00007

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 7/23/2009 Hydraulic Press Brick Co. 109-26822-00007 Final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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1		Mark Thacker Hydraulic Press Brick Co. PO Box 130 Brooklyn IN 46111 (Source CAATS) via confirmed delivery										
2		Morgan County Commissioners 180 South Main Street Martinsville IN 46151 (Local Official)										
3		Morgan Co Public Library 110 S Jefferson St Martinsville IN 46151-1999 (Library)										
4		Brooklyn Town Council P.O. Box 159 Brooklyn IN 46111 (Local Official)										
5		Clayton D. & Patricia A. Arthur 5178 Brenda Boulevard Greenwood IN 46143 (Affected Party)										
6		Morgan County Health Department 180 S Main Street, Suite 252 Martinsville IN 46151-1988 (Health Department)										
7		T. K. Forslund 8147 E. Old St. Rd. 144 Mooresville IN 46158 (Affected Party)										
8		David Jones 7977 N. Taylors Rd. Mooresville IN 46158 (Affected Party)										
9		Claudia Parker 6761 Centenary Rd. Mooresville IN 46158 (Affected Party)										
10		James Swails 6568 E. Rosebud Lane Mooresville IN 46158 (Affected Party)										
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