



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

May 21, 2004

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

TO: Interested Parties / Applicant
RE: Colonial Brick Corporation / 165-17593-00002
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

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

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

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

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and

- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

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

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

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

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



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Colonial Brick Corporation
817 West Park St.,
Cayuga, Indiana 47928**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses the addition of limits to Kiln 4 to render PSD review (326 IAC 2-2) not applicable pursuant to 326 IAC 2-7-10.5.

Operation Permit No.: T165-17593-00002	
Issued by: Original Signed by Janet G. McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 21, 2004 Expiration Date: May 21, 2009

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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)]

The Permittee owns and operates a stationary clay processing and brick manufacturing plant.

Responsible Official: President
Source Address: 817 West Park Street, Cayuga, Indiana, 47928
Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928
SIC Code: 3251
County Location: Vermillion
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD
Minor Source, Section 112 of the Clean Air Act

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

The source consists of the following permitted emission units and pollution control devices:

- (a) One brick firing operation, consisting of the following equipment; and
 - (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 1043.38 pounds of bricks per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998); and
 - (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 1556.74 pounds of bricks per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998).
- (b) One (1) grinder operation, operating within the grinder building, consisting of the following equipment:
 - (1) One (1) Cayuga Brick Clay Grinder, identified as UV-9, with a maximum capacity of 12.8 tons of raw clay per hour;
 - (2) One (1) Maco Apron conveyer, with a maximum capacity of 15 tons of raw clay per hour, operating within the grinder building;

- (3) One (1) shop built apron conveyor, with a maximum capacity of 15 tons of raw clay per hour,
- (4) One (1) McClanahan Single Roll 24" x 36" crusher, with a maximum capacity of 20 tons of raw clay per hour,
- (5) Two (2) Leahy screens, with a maximum capacity of 15 tons of raw clay per hour,
- (6) One (1) Crushed Clay hopper, with a maximum capacity of 15 tons of raw clay per hour, and
- (7) One (1) Ground Clay hopper, with a maximum capacity of 15 tons of raw clay per hour.

after the brick is machined using grinding operations described above, the brick is sent into a drier for moisture removal before sending into kilns. Due to the limited throughput at the drier, the grinding operations are restricted to 12.96 tons per hour.

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]
One (1) crushed brick pit road, identified as ID-14.[326 IAC 6-4]
- (b) Conveyors as follows:
Uncovered coal conveying of less than or equal to 120 tons per day [326 IAC 6-4]
- (c) Other activities or categories not previously identified with emissions below insignificant thresholds:[326 IAC 6-4]
 - (1) One (1) coal pile, identified as ID-10, with a maximum capacity of 40 tons,
 - (2) One (1) fuel storage pile, identified as ID-11, with a maximum capacity of 100 tons, and
 - (2) One (1) sand pile identified as ID-13, with a maximum capacity of 20 tons.

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]

This permit 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.

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

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

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

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ 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 a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (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 in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

- (b) 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]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) **Right to Operate After Application for Renewal** [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.
- (d) **United States Environmental Protection Agency Authority** [326 IAC 2-7-8(e)]
If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.(Refer CFR)

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

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

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

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

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

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

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

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 [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), 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. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(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.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements 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.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days 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 Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

C.12 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.

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 February 3, 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 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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 and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.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) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015
(and local agency when applicable)

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, (and local agency when applicable) 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]

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

- (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 Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (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.

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)]

One brick firing operation, consisting of the following equipment:

- (a) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 1043.38 pounds of bricks per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998); and
- (b) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 1556.74 pounds of bricks per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998).

(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 PSD Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and T165-7633-00002, issued on January 15, 1999 the source shall:

- (a) process less than 1055.0 pounds of brick per hour at kiln 4, which is equivalent to less than 4,621 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This process limit is required to limit the potential to emit of SO₂ to less than 16.64 tons (based on an emission factor of 7.2 lb of SO₂ / ton brick used) per 12 consecutive month period from kiln 4;
- (b) use less than 475.0 pounds of fuel per hour at kiln 4, which is equivalent to less than 2,081 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of SO₂ to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12 % and an emission factor of 22.23 lb of SO₂ / ton fuel used) per 12 consecutive month period from kiln 4.

These throughput and usage limits are required to limit the potential to emit of SO₂ from kiln 4 to less than 40 tons per 12 consecutive month period and make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1-1 (Sulfur Dioxide Emissions Limitations):

- (a) The SO₂ emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed six (6) pounds per mmBtu of coal combustion.

- (b) The sulfur content of the coal delivered to the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 4.12% by weight, provided the fuel mixture remains 57% coal and 43% sawdust.

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

Pursuant to 326 IAC 6-3-2 (Process Operations):

- (a) The allowable particulate emissions from each of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) shall not exceed 2.65 pounds per hour when each operating at a process weight rate of 1043.38 pounds per hour.
- (b) The allowable particulate emissions from each of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 3.46 pounds per hour when each operating at a process weight rate of 1556.74 pounds per hour.

The pound per hour limitation was calculated using the following equation:

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

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

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Prior to the end of five (5) year period from the date of last compliance date the Permittee shall perform PM testing on two (2) of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and one (1) of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) to verify stack data for PM emissions, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of last valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

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

- (a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:
 - (1) The name of the coal supplier; and

- (2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and
- (3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
- (4) The methods used to determine the properties of the coal; or

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

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of all the kiln stack exhausts shall be performed once per shift during normal daylight operations on all the days of the firing cycle 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 Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2 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 SO₂ emission limits established in D.1.1 and D.1.2.
 - (1) Calendar dates covered in the compliance determination period; and
 - (2) Actual coal usage since last compliance determination period; and
 - (3) Sulfur content, heat content, and ash content; and

- (4) Sulfur dioxide emission rates;
 - (5) Vendor analysis of coal and coal supplier certification, if the vendor analysis is used to determine compliance; and
 - (6) The percent of coal used in the fuel mixture.
- (b) Any revision to the SOP, which was submitted to IDEM, OAQ in 1999 as required by 326 IAC 3-7-5, shall be submitted to IDEM, OAQ.
 - (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) stack exhaust.
 - (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 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.2

FACILITY OPERATION CONDITIONS

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

One (1) grinder operation, operating within the grinder building, consisting of the following equipment:

- (a) One (1) Cayuga Brick Clay Grinder, identified as UV-9, with a maximum capacity of 12.8 tons of raw clay per hour;
- (b) One (1) Maco Apron conveyer, with a maximum capacity of 15 tons of raw clay per hour, operating within the grinder building;
- (c) One (1) shop built apron conveyor, with a maximum capacity of 15 tons of raw clay per hour,
- (d) One (1) McClanahan Single Roll 24" x 36" crusher, with a maximum capacity of 20 tons of raw clay per hour,
- (e) Two (2) Leahy screens, with a maximum capacity of 15 tons of raw clay per hour,
- (f) One (1) Crushed Clay hopper, with a maximum capacity of 15 tons of raw clay per hour, and
- (g) One (1) Ground Clay hopper, with a maximum capacity of 15 tons of raw clay per hour.

after the brick is machined using grinding operations described above, the brick is sent into a drier for moisture removal before sending into kilns. Due to the limited throughput at the drier, the grinding operations are restricted to 12.96 tons 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.2.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the grinder operation shall not exceed 22.81 pounds per hour when each operating at a process weight rate of 25,927 pounds per hour (equivalent to 12.96 tons per hour).

The pound 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.2.2 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 any control devices.

Compliance Determination Requirements

D.2.3 Particulate Matter

In order to minimize particulate matter emissions, the crushing operation shall always be performed inside the building, with the doors closed, and the grinding and screening operations shall always be performed in tight enclosed housings.

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

D.2.4 Visible Emissions Notations

- (a) Visible emission notations of the grinding operation shall be performed once per shift 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 Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the grinder operation exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Colonial Brick Corporation
Source Address: 817 West Park Street, Cayuga, Indiana, 47928
Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928
Part 70 Permit No.: T165-17593-00002

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) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Colonial Brick Corporation
Source Address: 817 West Park Street, Cayuga, Indiana, 47928
Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928
Part 70 Permit No.: T165-7633-00002

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
<input checked="" type="radio"/>	1. This is an emergency as defined in 326 IAC 2-7-1(12)
<input type="radio"/>	C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
<input type="radio"/>	C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<input checked="" type="radio"/>	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
<input type="radio"/>	C The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Colonial Brick Corporation
Source Address: 817 West Park Street, Cayuga, Indiana 47928
Mailing Address: P.O. Box 365, Cayuga, Indiana 47928
Part 70 Permit No.: T165-7633-00002
Facility: Kiln 4
Parameter: Brick throughput
Limit: process less than 4,621 tons of brick per twelve (12) consecutive month period, with compliance determined at the end of each month. This process limit is required to limit the potential to emit of SO₂ to less than 16.64 tons (based on an emission factor of 7.2 lb of SO₂ / ton brick used) per 12 consecutive month period from kiln 4 due to raw material processing.

YEAR: _____

Month	brick usage this month (tons)	brick usage previous 11 months (tons)	brick usage last 12 months (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Colonial Brick Corporation
 Source Address: 817 West Park Street, Cayuga, Indiana 47928
 Mailing Address: P.O. Box 365, Cayuga, Indiana 47928
 Part 70 Permit No.: T165-7633-00002
 Facility: Kiln 4
 Parameter: Fuel throughput
 Limit: use less than 2,081 tons of fuel per twelve (12) consecutive month period, with compliance determined at the end of each month. These usage and fuel sulfur content limits are required to limit the potential to emit of SO₂ to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12% and an emission factor of 22.23 lb of SO₂ / ton fuel used) per 12 consecutive month period from kiln 4 due to fuel usage.

YEAR: _____

Month	fuel usage this month (tons)	fuel usage previous 11 months (tons)	fuel usage last 12 months (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Colonial Brick Corporation
 Source Address: 817 West Park Street, Cayuga, Indiana 47928
 Mailing Address: P.O. Box 365, Cayuga, Indiana 47928
 Part 70 Permit No.: T165-7633-00002
 Facility: Six(6) small periodic kilns and five(5) large periodic brick kilns
 Parameter: SO₂ emissions in pounds per mmBtu (lb/mmBtu)
 Limit: The SO₂ emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed six (6) pounds per mmBtu of coal combustion.

YEAR: _____

Month	(1) Monthly Weighted Average Coal Sulfur Content** (%)	(2) Monthly Weighted Average Coal heat Content**	(2 * Value from (1) *2000) (Value from (2)) Equivalent Sulfur Dioxide Emissions (lbs/mmBtu)
Month 1			
Month 2			
Month 3			

** Calculate the weighted sulfur and heat content for coal based on weighed average of daily coal usage

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
 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: Colonial Brick Corporation
 Source Address: 817 West Park Street, Cayuga, Indiana, 47928
 Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928
 Part 70 Permit No.: T165-7633-00002

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="radio"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="radio"/> 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.

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

**Addendum to the
Technical Support Document (TSD) for a Part 70 Operating Permit Renewal**

Source Background and Description

Source Name: Colonial Brick Corporation
Source Location: 817 West Park Street, Cayuga, Indiana 47928
County: Vermillion
SIC Code: 3251
Operation Permit No.: T165-17593-00002
Permit Reviewer: RT / EVP

On March 4, 2004, the Office of Air Quality (OAQ) had a notice published in Daily Clintonian in Cayuga, Indiana, stating that Colonial Brick Corporation had applied for a Part 70 Operating Permit Renewal for the operation of clay processing and brick manufacturing plant. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed Part 70 Operating Permit Renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit Renewal should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit renewal. Bolded language has been added and the language with a line through it has been deleted.

1. Condition C.14 (b)(3) has been revised to clarify what is included in the notification as follows:

C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

-
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit ~~of~~ or control device be shut down, and it will be **ten (10)** days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. **The notification shall also include** the status of the applicable compliance monitoring parameter with respect to normal, and the results of the **response** actions taken up to the time of notification.

2. Condition C.17 (a) has been updated in order to reflect changes to 326 IAC 2-6 as follows:

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) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~
Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015
(and local agency when applicable)

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, (and local agency when applicable) on or before the date it is due.

3. In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113 (a) of the Clean Air Act, 42 U.S.C. § 7413 (a); and a letter from United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address use of credible evidence; otherwise, USEPA will object to the permit. The following language will be incorporated into the permit to address credible evidence.

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

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

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

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

Source Background and Description

Source Name: Colonial Brick Corporation
Source Location: 817 West Park Street, Cayuga, Indiana 47928
County: Vermillion
SIC Code: 3251
Operation Permit No.: T165-17593-00002
Permit Reviewer: RT / EVP

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Colonial Brick Corporation relating to the operation of a clay processing and brick manufacturing operation. Colonial Brick Corporation was issued Part 70 permit no. T165-7633-00002 on January 15, 1999.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One brick firing operation, consisting of the following equipment; and
- (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 1043.38 pounds of bricks per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998); and
 - (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 1556.74 pounds of bricks per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998).
- (b) One (1) grinder operation, operating within the grinder building, consisting of the following equipment:
- (1) One (1) Cayuga Brick Clay Grinder, identified as UV-9, with a maximum capacity of 12.8 tons of raw clay per hour;
 - (2) One (1) Maco Apron conveyer, with a maximum capacity of 15 tons of raw clay per hour, operating within the grinder building;
 - (3) One (1) shop built apron conveyor, with a maximum capacity of 15 tons of raw clay per hour;
 - (4) One (1) McClanahan Single Roll 24" x 36" crusher, with a maximum capacity of 20 tons of raw clay per hour;
 - (5) Two (2) Leahy screens, with a maximum capacity of 15 tons of raw clay per hour;

- (6) One (1) Crushed Clay hopper, with a maximum capacity of 15 tons of raw clay per hour ; and
- (7) One (1) Ground Clay hopper, with a maximum capacity of 15 tons of raw clay per hour.

after the brick is machined using grinding operations described above, the brick is sent into a drier for moisture removal before sending into kilns. Due to the limited throughput at the drier, the grinding operations are restricted to 12.96 tons per hour.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment

There are no new facilities to be reviewed

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour;
- (b) combustion source flame safety purging on startup;
- (c) gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (d) petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (e) the following VOC and HAP storage containers;
vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (f) refractory storage not requiring air pollution control equipment;
- (g) the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (h) paved and unpaved roads and parking lots with public access; [326 IAC 6-4]
one (1) crushed brick pit road, identified as ID-14.
- (i) conveyors as follows:
uncovered coal conveying of less than or equal to 120 tons per day; [326 IAC 6-4]
- (j) other activities or categories not previously identified with emissions below insignificant thresholds: [326 IAC 6-4]
 - (1) one (1) coal pile, identified as ID-10, with a maximum capacity of 40 tons;

- (2) one (1) fuel storage pile, identified as ID-11, with a maximum capacity of 100 tons; and
- (3) one (1) sand pile identified as ID-13, with a maximum capacity of 20 tons.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Part 70 No. T165-7633-00002, issued on January 15, 1999;
- (b) First Minor Source Modification No. 165-11525-00002, issued on December 22, 1999;
- (c) First Administrative Amendment No. 165-10605-00002, issued on March 1, 1999;
- (d) Second Administrative Amendment No. 165-11642-00002, issued on March 1, 2000;
- (e) First Reopening No. R 039-13229-00170, issued on December 21, 2001; and
- (f) First Significant Permit Modification No. 165-15184-00002, issued on June 12, 2002.

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 approvals are superseded by this permit.

The following conditions from the previous approvals have been revised in this Part 70 permit as follows:

- (a) Part 70 No. T165-7633-00002, issued on January 15, 1999, Condition D.1.5:

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and SO₂ testing on one of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and one of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) to verify stack data by the Permittee, utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, and Methods 6, 6A, 6C, or 8 for SO₂, 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. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Reason changed: The source has performed stack testing for PM and SO₂ on December 12, 2001.

- (b) Part 70 No. T165-7633-00002, issued on January 15, 1999, Condition D.1.6:

D.1.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

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

- (a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:
 - (1) The name of the coal supplier; and

- (2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and
 - (3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
 - (4) The methods used to determine the properties of the coal; or
- (b) Coal sampling and analysis shall be performed using one of the following procedures:
- (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least 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
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11), using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

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

Reason changed: The source is using option (a) to comply with the sulfur dioxide emission limitation of six (6.0) pounds per mmBtu. Hence options (b) and (c) are removed from this renewal.

- (c) Part 70 No. T165-7633-00002, issued on January 15, 1999, Condition D.1.8:

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2 and D.1.3, 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 PM and SO₂ emission limits established in D.1.1, D.1.2 and D.1.3.
- (1) Calendar dates covered in the compliance determination period; and
 - (2) Actual coal usage since last compliance determination period; and
 - (3) Sulfur content, heat content, and ash content; and
 - (4) Sulfur dioxide emission rates; and
 - (5) Vendor analysis of coal and coal supplier certification, if the vendor analysis is used to determine compliance.
- (b) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to 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.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) stack exhaust.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Reason changed: Condition D.1.8 (b) has been modified since the source has already developed and submitted standard operating procedure(SOP) to IDEM in 1999.

- (d) Part 70 No. T165-7633-00002, issued on January 15, 1999, Condition D.1.9:

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 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).

Reason Changed: Condition D.1.2 has been added to the reporting requirements. Pursuant to 326 IAC 2-7-19 (reporting requirements) the source has to report SO₂ quarterly emissions in pounds per mMBtu.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit 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 administratively complete Part 70 permit application for the purposes of this review was received on April 15, 2003.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 9)

Potential to Emit

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

The source was issued a Part 70 operating permit on February 18, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Part 70 operating permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ facility	Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	NO _x	VOC	CO	Worst Case Single HAP	Total HAPs
Kiln Emissions from Brick	12.16	6.53	213.54	0.00	0.00	7.11	0.00	0.00
Kiln Emissions from Brick	21	21	279.55	129.03	0.87	0.75	0.00	0.00
Pre-Kiln Emissions	156.15	156.15	0.00	18.74	0.00	0.00	0.00	0.00
Unpaved Roads	38.45	13.45	0.00	0.00	0.00	0.00	0.00	0.00
Conveying and Handling	0.61	0.061	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE	228.37	197.19	493.07	147.77	0.87	7.86	0.00	0.00

- (a) The potential to emit (as defined in 326 IAC 1-2-55) of source is equal to or greater than 100 tons per year of PM-10, and SO₂. Therefore, the source is subject to the provisions of 326 IAC 2-7.

- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	48.21
PM-10	48.21
SO ₂	153.28
VOC	0.00
CO	2.83
NO _x	27.87

No previous hazardous air pollutant (HAP) emission data has been received from the source.

County Attainment Status

The source is located in Vermillion County.

Pollutant	Status
TSP	attainment
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (b) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vermillion County has been designated as attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Vermillion County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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.

Federal Rule Applicability

- (a) The kiln operation is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as only the calcining and drying of raw materials prior to firing of the brick are covered for the brick industry. The drying operation is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as the dryer, used for moisture removal, was constructed prior to the rule applicability date of April 23, 1986.
- (b) The storage vessels, as described in insignificant activities (items (c),(d), and(e)), are not subject to New Source Performance Standard 326 IAC 12, 40 CFR 60.110 through 60.117, Subpart Kb, as the capacity of the storage tanks is less than 10,600 gallons
- (c) 40 CFR 63, Subpart JJJJJ is applicable if the source operates a brick and structural clay products (BSCP) manufacturing facility that is, located at, or is part of, a major source of HAP emissions. Colonial Brick Corporation is not a major source for HAP emissions (i.e., the source does not have the potential to emit 10 tons per year of single HAP or 25 tons per year or greater of combination of HAPs). Therefore this facility is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart JJJJJ.
- (d) The requirements of the section 112 (j) of the Clean Air Act (40 CFR part 63.50 through 63.56) are not applicable to this source because the source is not a major source of HAPS (i.e., the source does not have the potential to emit 10 tons per year of single HAP or 25 tons per year or greater of combination of HAPs).
- (e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:
 - (1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
 - (2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
 - (3) the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to classified as a Part 70 major source.

This source was issued initial Part 70 permit No. T165-7633-00002, issued on January 12, 1999.

The PSEUs as six (6) small periodic brick kilns and five (5) large periodic kilns have emissions limitation. However, these units are not a large unit as defined in 40 CFR 64.5 and do not use a control device to comply with the emission limitation. Therefore Compliance Assurance Monitoring (CAM) is not applicable to the brick kilns.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is a major source under 326 IAC 2-2 (PSD) with potential to emit of SO₂ greater than 250 tons per year. The source has always been major for PSD since it was constructed before 1965, which was prior to the PSD applicability date of August 7, 1980. Since 1980 the source has constructed kiln 4 in 1985 and modified kiln 4 in 1989. The unlimited potential to emit of SO₂ from kiln 4, based on its maximum process capacity of 1556.7 bricks per hour and the maximum fuel usage of 625.5 pounds per hour, is 55.0 tons per year. To render PSD review not applicable, the source accepted the limitations of material processed and fuel usage at kiln 4, such that the limited potential to emit of SO₂ is less than 40 tons per 12 consecutive month period.

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and T165-7633-00002, issued on January 15, 1999 the source shall

- (a) process less than 4,621 tons of brick per 12 consecutive month period, with compliance determined at the end of each month. This process limit is required to limit the potential to emit of SO₂ to less than 16.64 tons (based on an emission factor of 7.2 lb of SO₂ / ton brick used) per 12 consecutive month period from kiln 4 due to raw material processing;
- (b) use less than 2,081 tons of fuel with sulfur content of 4.12% or less per 12 consecutive month period, with compliance determined at the end of each month. These usage and fuel sulfur content limits are required to limit the potential to emit of SO₂ to less than 23.12 tons (based on an emission factor of 22.23 lb of SO₂ / ton fuel used) per 12 consecutive month period from kiln 4 due to fuel usage.

Compliance with these limits will limit total SO₂ potential to emit from kiln 4 to less than 40 tons per year and make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

The source did not have any new constructions or modifications, other than the construction and modification of kiln 4, since 1980.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of SO₂, PM₁₀ and NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

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 this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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 non overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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).

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable particulate emissions from each of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) shall not exceed 2.65 pounds per hour when each operating at a process weight rate of 1043.38 pounds per hour.

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

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

$$E = 4.10 * 0.52^{0.67} \\ E = 2.65 \text{ lb/hr} \quad \text{for } P = 0.52 \text{ tons/hr}$$

According to the emission calculations (see page 8 of Appendix A), each of the six kilns has a potential to emit (PTE) PM of 1.09 pounds per hour, and the source is in compliance with the requirement.

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable particulate emissions from each of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 3.46 pounds per hour when each operating at a process weight rate of 1556.74 pounds per hour.

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

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

$$E = 4.10 * 0.778^{0.67} \\ E = 3.46 \text{ lb/hr} \quad \text{for } P = 0.778 \text{ ton/hr}$$

According to the emission calculations (see page 8 of Appendix A), each of the five kilns has a potential to emit (PTE) PM of 1.62 pounds per hour, and the source is in compliance with the requirement.

- (c) Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable particulate emissions rate from the grinder operation shall not exceed 22.81 pounds per hour when operating at a process weight rate of 25,927 pounds per hour (equivalent to 12.96 tons per hour).

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

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

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

$$E = 4.10 * 12.96^{0.67} \\ E = 22.82 \text{ lb/hr} \quad \text{for } P = 12.96 \text{ ton/hr}$$

According to the emission calculations (see page 8 of Appendix A), the grinder operation has a potential to emit (PTE) PM of 287.84 pounds per hour. With an enclosure the PTE PM is limited to 14.40 pounds per hour, and the source is in compliance with the requirement by using the enclosure.

- (d) The welding operations (item (g)) described under insignificant activities) at each station, consume less than six hundred twenty-five (625) pounds of rod per day, and the torch cutting operations (items (d), (h), (i), & (j) described under insignificant activities) cut less than three thousand four hundred (3,000) inches per hour of stock one (1) inch thickness or less. Therefore, pursuant to 326 IAC 6-3-1(b), welding and cutting operations are exempt from the requirements of 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes).

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

Pursuant to 326 IAC 7-1.1-2(a)(1) (Sulfur Dioxide Emission Limitations) the sulfur dioxide emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) burning coal and sawdust mixtures shall be limited to 6.0 pounds per million Btu of coal. Therefore, the sulfur dioxide (SO₂) content of coal delivered to the kilns shall be limited to four and six fiftieths percent (4.12%) by weight.

According to the emission calculations, each of the

- (a) six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) have a potential to emit (PTE) SO₂ of 2.22 pounds per mmBtu;
- (b) five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) have a potential to emit (PTE) SO₂ of 2.51 pounds per MMBtu.

and each facility is in compliance with the requirement. (See emission calculations, pages 3,4 and 7 of 9).

326 IAC 7-2-1(Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-2-1 (Reporting Requirements), the source shall submit to the commissioner upon request: calendar month or average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu.

Testing requirements

326 IAC 2-7-6(1),(6) (Testing Requirements)

The Permittee shall perform PM testing on two (2) of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and one(1) of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) to verify stack data for PM emissions, 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.

When the emission units are of identical design (i.e. same process weight rates, having same heat input capacities, burning same fuel), IDEM believes that it may not be necessary to test all the emission units. Therefore, IDEM has decided that the Permittee shall perform PM testing on two of the six (6) small periodic kilns and one of the five (5) large periodic brick kilns.

IDEM also believes that sources that have a clear method of compliance monitoring and which can demonstrate compliance with a limit via. record keeping or reporting, then testing is not required. Therefore, the source is not required to repeat stack testing for sulfur dioxide (SO₂) six (6) pounds per mmBtu emission limitation, as the source demonstrates compliance with this emission limitation by providing the vendor analysis of coal delivered.

Compliance Requirements

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

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

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

- (a) The kiln operation has applicable compliance monitoring conditions as specified below:
- (1) Visible emission notations of all the kiln stack exhausts shall be performed once per shift during normal daylight operations on all the days of the firing cycle when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (b) The grinding operation shall always be performed inside the building, with the doors closed, and the grinding and screening operations shall always be enclosed in tight housings. The grinding operation has applicable compliance monitoring conditions as specified below:
- (1) Visible emission notations of the grinding operation shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the kiln operation must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this brick manufacturing facility shall be subject to the conditions of the attached proposed **Part 70 Permit No. T165-17593-00002**.

Appendix A: Emissions Calculations

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Kiln emissions from Brick

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Emissions for all eleven (11) Kilns

Maximum rate lbs/hr
 Maximum rate tons/year

14043.98
61512.6324

Emissions Generating Activity

Pollutant	Emissions from Kiln (pounds per ton)	Control Efficiency	TOTAL (tons per year)
PM	0.41	0%	12.61
PM10	0.22	0%	6.77
SO2	7.2	0%	221.45
NOx	0	0%	0.00
VOC	0	0%	0.00
CO	0.24	0%	7.38
total HAPs	0	0%	0.00
worst case single HAP	0	0%	0.00

Methodology:

Emission and control factors based on stack test data submitted by the applicant.

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.

Appendix A: Emissions Calculations

Kiln Emissions from Fuel

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Emissions for all eleven (11) Kilns

Maximum rate lbs/hr	5892.72
Maximum rate tons/year	25810.1136

Emissions Generating Activity

Pollutant	Emissions from Kiln (pounds per ton)	Control Efficiency	TOTAL (tons per year)
PM	1.67	0%	21.55
PM10	1.67	0%	21.55
SO2	22.23	0%	286.88
NOx	10.26	0%	132.41
VOC	0.07	0%	0.90
CO	0.06	0%	0.77
total HAPs	0	0%	0.00
worst case single HAP	0	0%	0.00

Methodology:

Emission and control factors based on stack test data submitted by the applicant.

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.

Appendix A: Emissions Calculations

Kiln 4 Uncontrolled Emissions from Brick and Fuel

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Emissions from Kiln 4 (Brick - Uncontrolled)

Maximum rate lbs/hr	1556.74
Maximum rate tons/year	6818.5212

Emissions Generating Activity

Pollutant	Emissions from Kiln (Brick) pounds per ton	TOTAL (tons per year)
PM	0.41	1.40
PM10	0.22	0.75
SO2	7.2	24.55
NOx	0	0.00
VOC	0	0.00
CO	0.24	0.82
total HAPs	0	0.00
worst case single HAP	0	0.00

Emissions from Kiln 4 (Fuel - Uncontrolled)

Maximum rate lbs/hr	625.5
Maximum rate tons/year	2739.69

Emissions Generating Activity

Pollutant	Emissions from Kiln (Fuel) pounds per ton	TOTAL (tons per year)
PM	1.67	2.29
PM10	1.67	2.29
SO2	22.23	30.45
NOx	10.26	14.05
VOC	0.07	0.10
CO	0.06	0.08
total HAPs	0	0.00
worst case single HAP	0	0.00

Total Uncontrolled Emissions from both Brick and Fuel

Pollutant	Emissions from Brick tons per year	Emissions from Fuel tons per year	TOTAL (tons per year)
PM	1.40	2.29	3.69
PM10	0.75	2.29	3.04
SO2	24.55	30.45	55.00
NOx	0.00	14.05	14.05
VOC	0.00	0.1	0.10
CO	0.82	0.08	0.90
total HAPs	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00

Methodology:

Emission and control factors based on stack test data submitted by the applicant.

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.

Appendix A: Emissions Calculations

Kiln 4 Controlled Emissions from Brick and Fuel

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Emissions from Kiln 4 (Brick - Controlled)

Maximum rate lbs/hr	1055
Maximum rate tons/year	4620.9

Emissions Generating Activity

Pollutant	Emissions from Kiln (Brick) pounds per ton	TOTAL (tons per year)
PM	0.41	0.95
PM10	0.22	0.51
SO2	7.2	16.64
NOx	0	0.00
VOC	0	0.00
CO	0.24	0.55
total HAPs	0	0.00
worst case single HAP	0	0.00

Emissions from Kiln 4 (Fuel - Controlled)

Maximum rate lbs/hr	475
Maximum rate tons/year	2080.5

Emissions Generating Activity

Pollutant	Emissions from Kiln (Fuel) pounds per ton	TOTAL (tons per year)
PM	1.67	1.74
PM10	1.67	1.74
SO2	22.23	23.12
NOx	10.26	10.67
VOC	0.07	0.07
CO	0.06	0.06
total HAPs	0	0.00
worst case single HAP	0	0.00

Total Controlled Emissions from both Brick and Fuel (Controlled)

Pollutant	Emissions from Brick tons per year	Emissions from Fuel tons per year	TOTAL (tons per year)
PM	0.95	1.74	2.69
PM10	0.51	1.74	2.25
SO2	16.64	23.12	39.76
NOx	0.00	10.67	10.67
VOC	0.00	0.07	0.07
CO	0.55	0.06	0.61
total HAPs	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00

Methodology:

Emission and control factors based on stack test data submitted by the applicant.

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.

Appendix A: Emissions Calculations

Grinding and Raw Materials Handling Emissions

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Uncontrolled Emissions

Maximum rate lbs/hr	25927
Maximum rate tons/year	113560.26

Pollutant	Grinding Emissions (pounds per ton)	Storage Emissions (Pounds per ton)	Brick Emissions (Pounds per ton)	Crushing Emissions (Pounds per ton)	Screening Emissions (Pounds per ton)	Conveying Emissions (Pounds per ton)	TOTAL (tons per year)
PM	22.21	9.94	0.00	0.00	0.00	0.00	1825.39
PM10	22.21	9.94	0.00	0.00	0.00	0.00	1825.39
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.19	0.00	0.00	0.00	10.95
VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Controlled Emissions (with 95 % PM control for grinder and storage)

Maximum rate lbs/hr	25927.00
Maximum rate tons/year	113560.26

Pollutant	Grinding Emissions (pounds per ton)	Storage Emissions (Pounds per ton)	Brick Emissions (Pounds per ton)	Crushing Emissions (Pounds per ton)	Screening Emissions (Pounds per ton)	Conveying Emissions (Pounds per ton)	TOTAL (tons per year)
PM	1.11	0.50	0.00	0.00	0.00	0.00	91.27
PM10	1.11	0.50	0.00	0.00	0.00	0.00	91.27
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.19	0.00	0.00	0.00	10.95
VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Methodology

Emissions data based on AP-42, table 11.3-2

Total Emissions = (grinding + storage + brick drier) * tons of brick/ year * 1 ton/2000 lbs

PM = PM10

Assume 60% wet suppression of dust from 4% moisture content.

calculations are based on the 3.8 pounds brick, which is the average weight of brick manufactured at colonial brick corporation

Road Transport Emissions

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

**** conveying / handling ****

The following calculations determine the amount of emissions created by material handling of aggregate, based on 8760 hours of use and **AP-42, Ch 13.2.4.3**

$$E_f = .0032 * \frac{(U/5)^{1.3} * k}{(M/2)^{1.4}} = 0.009327 \text{ lb/ton}$$

where k = 1 (particle size multiplier)
 U = 12 mph mean wind speed (worst case)
 M = 2.1 % moisture for stone quarrying - various limestone products

$$P M : 0.009327378 \text{ lb/ton} \times \frac{15 \text{ ton/hr} \times 8760 \text{ hr/yr}}{2000 \text{ lb/ton}} = 0.612809 \text{ ton/yr}$$

$$P M-10: 0.1 \text{ of PM} = 0.061281 \text{ ton/yr}$$

**** unpaved roads ****

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and **AP-42, Ch 13.2.2.2**

$$3 \text{ trip/hr} \times 0.25 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 13140 \text{ miles per year}$$

$$E_f = k * 5.9 * (s/12) * (S/30) * (W/3)^{0.7} * (w/4)^{0.5} * ((365-p)/365) = 5.8532 \text{ lb/mile}$$

where k = 0.8 (particle size multiplier)
 s = 9.6 % silt content of unpaved roads for stone quarrying and processing
 p = 125 days of rain greater than or equal to 0.01 inches
 S = 10 miles/hr vehicle speed
 W = 25.5 tons average vehicle weight
 w = 10 wheels

$$5.853186476 \text{ lb/mi} \times \frac{13140 \text{ mi/yr}}{2000 \text{ lb/ton}} = 38.45544 \text{ tons/yr}$$

$$P M-10: 0.35 \text{ of PM} = 13.4594 \text{ ton/yr}$$

Methodology:

Average vehicle weight is = (fully loaded weight - tare weight)/2 + tare weight

Appendix A: Emissions Calculations

Allowable Sulfur content of Coal

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

I. Heat input based on fuel mixture of 57% coal and 43% sawdust.	8500	Btu/lb
II. Maximum coal consumption.	14391.9	tons/yr
III. Allowable SO ₂ emissions from coal based on 6 pounds SO ₂ per mmBtu.	1188.9	tons/yr
IV. Allowable percentage of sulfur in coal.	0.0412	

Methodology:

I. Heat input based on fuel mixture of 57% coal and 43% sawdust in Btu per pound =

Emission and control factors based on stack test data submitted by the applicant.

II. Maximum coal consumption in tons per year =

$49 \times 1,000,000 \text{ (Btu/hr)} / 8500 \text{ (Btu/lb)} \times 8760 \text{ (hrs/yr)} / 2000 \text{ (lbs/ton)} \times 57\% \text{ coal in fuel mixture}$

III. Allowable SO₂ emissions from coal based on 6 pounds SO₂ per mmBtu =

$49 \text{ (mmBtu/hr)} \times 6 \text{ (lbs/mmBtu)} \times 8760 \text{ (hrs/year)} / 2000 \text{ (lbs/ton)}$

IV. Allowable percentage of sulfur in coal =

$1,188.9 \text{ (tons SO}_2\text{/yr)} / 14,391 \text{ (tons coal/yr)} / 2 \text{ (SO}_2\text{/S)} \times 100\%$

Emission factors based on fuel test data submitted by the applicant.

Appendix A: Emissions Calculations

326 IAC 6-3-2 Process Operations Compliance Calculations

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

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Six (6) small Periodic Brick Kiln

Maximum rate lbs/hr 1043.38
 Maximum rate tons/hour 0.52169 Allowable emissions rate in lbs/ hr =2.65

Pollutant	Kiln emissions from Brick (Pounds per ton)	Kiln emissions from Fuel (Pounds per ton)	TOTAL Pounds per hour
PM	1.67	0.41	1.09
PM10	1.67	0.22	0.99

Five (5) large Periodic Brick Kiln

Maximum rate lbs/hr 1556.74
 Maximum rate tons/hour 0.77837 Allowable emissions rate in lbs/ hr =3.46

Pollutant	Kiln emissions from Brick (Pounds per ton)	Kiln emissions from Fuel (Pounds per ton)	TOTAL Pounds per hour
PM	1.67	0.41	1.62
PM10	1.67	0.22	1.47

Grinding Operation

Maximum rate lbs/hr 25927
 Maximum rate tons/hour 12.9635 Allowable emissions rate in lbs/ hr =22.81

Pollutant	Kiln emissions from Brick (Pounds per ton)	Control efficiency ⁽¹⁾	TOTAL Pounds per hour
PM	22.21	95%	14.40
PM10	22.21	95%	14.40

(1) The control efficiency is based on the material balance

Appendix A: Emissions Calculations

Total Emissions from the entire source

Company Name: Colonial Brick Corporation
Address City IN Zip: 817 west Park Street, Cayuga, IN, 47928
Plt ID: T165-17593-00002
Reviewer: RT /EVP
Date: 11/03/03

Uncontrolled Potential Emissions

Pollutant	Kiln Emissions from Brick (tons per year)	Kiln Emissions from Fuel (tons per year)	Pre- Kiln Emissions (Grinding, Storage etc..) (tons per year)	Unpaved Roads (tons per year)	Conveying and Handling (tons per year)	TOTAL (tons per year)
PM	12.61	21.55	1825.39	38.45	0.61	1898.61
PM10	6.77	21.55	1825.39	13.45	0.061	1867.22
SO2	221.45	286.88	0	0	0	508.33
NOx	0	132.41	10.95	0	0	143.36
VOC	0	0.9	0	0	0	0.90
CO	7.38	0.77	0	0	0	8.15
total HAPs	0	0	0	0	0	0.00
worst case single HAP	0	0	0	0	0	0.00

Controlled Potential Emissions

Pollutant	Kiln Emissions from Brick (tons per year)	Kiln Emissions from Fuel (tons per year)	Emissions (Grinding, Storage etc..) (tons per year)	Unpaved Roads (tons per year)	Conveying and Handling (tons per year)	TOTAL (tons per year)
PM	12.16	21	91.27	38.45	0.61	163.49
PM10	6.53	21	91.27	13.45	0.061	132.31
SO2	213.54	279.55	0	0	0	493.09
NOx	0	129.03	10.95	0	0	139.98
VOC	0	0.87	0	0	0	0.87
CO	7.11	0.75	0	0	0	7.86
total HAPs	0	0	0	0	0	0.00
worst case single HAP	0	0	0	0	0	0.00

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