



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 27, 2012

RE: Brampton Brick, Inc. / 153-32149-00033

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

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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



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Mr. Michael Rixner
Brampton Brick, Inc.
1256 E CR 950 N
Farmersburg, IN 47850

November 27, 2012

Re: 153-32149-00033
Significant Permit Modification to
Part 70 Renewal No.: T 153-30898-00033

Dear Mr. Rixner:

Brampton Brick, Inc. was issued a Part 70 Operating Permit Renewal on July 12, 2012 for a stationary brick manufacturing source. A letter requesting changes to this permit was received on July 26, 2012. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of revising the testing requirements for tunnel kiln EU6 such that testing is only required once every five (5) years for 100% natural gas combustion and either once every five (5) years from the last valid stack test for a petcoke / natural gas mixture or within ninety (90) days of beginning to combust a petcoke / natural gas mixture, whichever is later and modifying the PSD minor limits for the tunnel kiln EU6 and the grinding room EU1 to allow more flexibility and ensure PSD minor status.

For your convenience, the entire Part 70 Operating Permit as modified is attached.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Kristen Willoughby, OAQ, 100 North Senate Avenue, MC 61-53 1003 IGCN, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Kristen Willoughby or extension (3-3031), or dial (317) 233-3031.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document

JLA/kw

cc: File – Sullivan County
Sullivan County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Brampton Brick, Inc.
1256 E CR 950 N
Farmersburg, Indiana 47850

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

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

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

Operation Permit No.: T153-30898-00033	
Issued by: Original Signed Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 12, 2012 Expiration Date: July 12, 2017

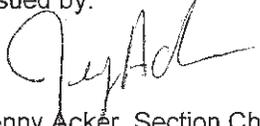
Significant Permit Modification No.: 153-32149-00033	
Issued by:  Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 27, 2017 Expiration Date: July 12, 2017

TABLE OF CONTENTS

A. SOURCE SUMMARY	5
A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]	
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]	
A.4 Part 70 Permit Applicability [326 IAC 2-7-2]	
B. GENERAL CONDITIONS	9
B.1 Definitions [326 IAC 2-7-1]	
B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]	
B.5 Severability [326 IAC 2-7-5(5)]	
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]	
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]	
B.11 Emergency Provisions [326 IAC 2-7-16]	
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]	
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]	
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]	
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]	
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]	
B.20 Source Modification Requirement [326 IAC 2-7-10.5]	
B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	20
Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Opacity [326 IAC 5-1]	
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5 Fugitive Dust Emissions [326 IAC 6-4]	
C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]	
C.7 Stack Height [326 IAC 1-7]	
C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-7-6(1)]	
C.9 Performance Testing [326 IAC 3-6]	

Compliance Requirements [326 IAC 2-1.1-11]

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

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

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64]
[326 IAC 3-8]
- C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
[326 IAC 2-7-6(1)]

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

- C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]
- C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5]
[326 IAC 2-7-6]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- C.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]
- C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64]
[326 IAC 3-8]

Stratospheric Ozone Protection

- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS - Clay/Shale Processing..... 29

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

- D.1.1 Particulate [326 IAC 6-3-2]
- D.1.2 PSD Minor Limit [326 IAC 2-2]
- D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

Compliance Determination Requirements

- D.1.4 Particulate Control [326 IAC 2-7-6(6)]
- D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.1.6 Visible Emissions Notations [40 CFR 64]
- D.1.7 Dust Collector Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]
- D.1.8 Broken or Failed Bag Detection

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

- D.1.9 Record Keeping Requirements
- D.1.10 Reporting Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS - Brick Manufacturing..... 33

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

- D.2.1 Particulate [326 IAC 6-3-2]
- D.2.2 PSD Minor Limit [326 IAC 2-2]
- D.2.3 PSD Minor Limit [326 IAC 2-2]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

Compliance Determination Requirements

- D.2.5 Particulate and Sulfur Dioxide Control [326 IAC 2-7-6(6)]
- D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.2.7 Visible Emissions Notations [40 CFR 64]
- D.2.8 Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]
- D.2.9 Broken or Failed Bag Detection

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

- D.2.10 Record Keeping Requirements
- D.2.11 Reporting Requirements

D.3. EMISSIONS UNIT OPERATION CONDITIONS - Petcoke Handling 39

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

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

E.1. EMISSIONS UNIT OPERATION CONDITIONS - Clay/Shale Processing 40

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

- E.1.1 General Provisions Relating to NSPS Subpart OOO [326 IAC 12]
[40 CFR Part 60, Subpart A]
- E.1.2 NSPS Subpart OOO Requirements [40 CFR Part 60, Subpart OOO] [326 IAC 12]

Certification 42
Emergency Occurrence Report 43
Semi-Annual Natural Gas Fired Tunnel Kiln Certification 45
Quarterly Report..... 46
Quarterly Deviation and Compliance Monitoring Report 49

Attachment A - Fugitive Dust Control Plan
Attachment B - NSPS, Subpart OOO

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(14)][326 IAC 2 7 1(22)]

The Permittee owns and operates a stationary brick manufacturing source.

Source Address:	1256 E CR 950 N, Farmersburg, Indiana 47850
General Source Phone Number:	(812) 397-2190
SIC Code:	3251
County Location:	Sullivan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) quarry, approved in 2007 for construction, capacity: 350,000 pounds of shale per hour.
- (b) Primary Clay/shale processing operations, identified as EU1A, approved in 2007 for construction, consisting of the following:
 - (1) One (1) primary raw shale crusher (Jaw Crusher) (EU1A), totally enclosed within building 2, capacity: 175 tons per hour. Under NSPS Subpart OOO, this is an affected facility enclosed in a building.
 - (2) One (1) feeder hopper for incoming shale/clay, identified as AF-1 and one (1) raw shale storage conveyor, identified as C2W, where AF-1 and C2W are uncovered and inside the building, capacity: 175 tons per hour, each. A dribble belt C1D is located beneath AF1 to catch shale spillage that is rerouted to C2W. C1D is covered and located inside the building, capacity: ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (3) Four (4) primary crusher conveyors, identified as C3, C4, C5D, and C6W and one (1) feeder hopper, identified as AF2, where C3, C4, and AF2 are uncovered and inside the building; C5D is covered and inside the building; and C6W is uncovered while inside the building and C6W is covered outside between buildings 2 and 3 and transfer points. Capacity: C3 and C4 175 tons per hour each; AF2 and C6W 110 tons per hour each; and C5D ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.

- (c) Secondary Clay/shale processing operations, identified as EU1, approved in 2007 for construction, consisting of the following:
- (1) One (1) grinding room, equipped with a grinding mill, four (4) screens, and secondary crushing and screening, equipped with a dust collector, identified as CE1, exhausting to stack SC1, capacity: 94 tons per hour. Under NSPS Subpart OOO, this is an affected facility with a stack.
 - (2) Three (3) enclosed ground shale storage bins, equipped with a dust collector, identified as CE1, exhausting to stack SC1, each with a storage capacity of 200 tons, throughput: 100 tons per hour, each. Under NSPS Subpart OOO, these are affected facilities with a stack.
 - (3) Four (4) grinding room conveyors for mill and screen input, identified as C7A, C8, C9, and C7BW, where C9 is uncovered and C7A, C8, and C7BW are covered and all conveyors are located inside the building, capacity: 250 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (4) Seven (7) grinding room conveyors for fines transport to storage bins, identified as C10, C11, C12W, C13, C11A, C14AR, and C14BR; capacity: C10, C11, C12W, C13, C14AR, and C14BR are 110 tons per hour each; C11A is four (4) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (5) Six (6) grinding room conveyors for fines transport from storage bins, identified as C15W, C16W, C17W, C18, C19, and BF1; all are inside the building, where C18 is covered and C15W, C16W, C17W, C18, C19, and BF1 are uncovered, capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (6) Two (2) grinding room conveyors feeding brick manufacturing operations, identified as C20W and C21, where C20W is uncovered and inside the building and C21 is covered and between buildings; capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
- (d) Brick manufacturing operations, approved in 2007 for construction, consisting of the following:
- (1) Extrusion, color mixing and brick cutting or setting, using enclosed wet processes.
 - (2) One (1) holding room for pre-drying, identified as EU2, using waste heat from the tunnel kiln, exhausting to stack SD1, capacity: 49,200 pounds of green brick per hour.
 - (3) One (1) brick tunnel dryer, identified as EU3, using waste heat from the tunnel kiln, exhausting to stacks SD2 and SD3, capacity: 49,200 pounds of green brick per hour.
 - (4) One (1) tunnel kiln, identified as EU6, using 30% to 40% natural gas and 60% to 70% petcoke, modified in 2009 for burning 100% natural gas, equipped with a scrubber and dry lime injection baghouse combination, identified as CE2, exhausting to stack SK1, capacity: 49,200 pounds of brick per hour.

- (5) One (1) lime silo, identified as EU7, used to scrub SO₂, HF and HCl from lime exhaust, receiving exhaust via enclosed airway, equipped with a baghouse, identified as CE5, exhausting to vent V2, with a storage capacity of 3,700 cubic feet and a throughput capacity of 0.475 tons per hour and 4,161 tons per year.
 - (6) One (1) waste reactant storage silo, identified as EU8, approved for construction in 2007, receiving exhaust via enclosed airway, equipped with a baghouse, identified as CE6, exhausting to vent V3, with a storage capacity of 4,944 cubic feet and a throughput capacity of 1,300 pounds per hour (5,694 tons per year).
- (e) Petcoke operations, approved in 2007 for construction, consisting of the following:
- (1) One (1) petcoke grinding operation, identified as EU4, equipped with a baghouse, identified as CE3, exhausting to stack SG1, capacity: 1,947 pounds of petcoke per hour.
 - (2) One (1) petcoke storage silo, identified as EU5, receiving petcoke via an enclosed airway, equipped with a baghouse, identified as CE4, exhausting to vent V1, with a storage capacity of 3,040 cubic feet, and a throughput capacity of 0.97 tons per hour and 5,842 tons per year.
 - (3) One (1) petcoke dosing silo, identified as EU11, receiving petcoke via an enclosed airway, equipped with a baghouse, identified as CE9, exhausting to vent V6, with a storage capacity of 3,040 cubic feet, and a throughput capacity of 0.97 tons per hour and 5,842 tons per year.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2 7 1(21)][326 IAC 2 7 4(c)][326 IAC 2 7 5(14)]

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

- (a) Paved and unpaved roads and parking lots with public access. [326 IAC 6-5]
- (b) One (1) outside, three-sided storage bunker (maximum storage capacity of 50 tons) will receive from conveyor #W7 bad slugs of clay produced during the forming process. [326 IAC 6-5]
- (c) One (1) parting agent (corn grit, sand or sand-like material) hopper (EU13) with an integral wet scrubber (CE12) and pneumatic conveyor (EU14) with a baghouse, identified as CE13. (Note: baghouse is utilized for dust minimization within the building and is not necessary for compliance with any regulatory limits). [326 IAC 6-5]
- (d) Three (3) outdoor staging piles of moist, uncrushed shale/clay received directly from the mine are located to the north of building B1. Each staging pile consists of moist, large diameter shale/clay material. Four (4) truck loads per pile for a maximum of 160 tons per pile are moved through the production process in one (1) day. Approximately 125,000 tons/year are staged and moved through the production process. [326 IAC 6-5]
- (e) Two (2) wet waste staging piles of shale/clay, located behind buildings B2 and B4. The staging piles consist of wet, unfired green brick pieces that were rejected, and placed in the outdoor pug (BUNK1). Approximately a maximum of 8,000 tons/year are staged and will either be returned to the quarry or used in brick production. During inclement weather, the piles are covered with plastic. [326 IAC 6-5]

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T153-30898-00033, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

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

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

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

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

and

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

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

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

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

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

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

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

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

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

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T153-30898-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

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

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

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

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

Request for renewal shall be submitted to:

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

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

subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

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

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

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

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

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

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

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

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

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

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

and

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

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

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

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

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

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

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

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

- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

C.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 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.

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

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 that meets the requirements of 326 IAC 2-7-6(1) by a "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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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)][40 CFR 64][326 IAC 3-8]

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

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

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

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

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

- (b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

- (I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:
 - (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
 - (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
 - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
 - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (e) The Permittee shall record the reasonable response steps taken.
- (II)
 - (a) *CAM Response to excursions or exceedances.*
 - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective

actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- (2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems;
or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing,

reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

- (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

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

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

C.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]
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
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64][326 IAC 3-8]

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

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Clay/shale Processing

- (b) Primary Clay/shale processing operations, identified as EU1A, approved in 2007 for construction, consisting of the following:
- (1) One (1) primary raw shale crusher (Jaw Crusher) (EU1A), totally enclosed within building 2, capacity: 175 tons per hour. Under NSPS Subpart OOO, this is an affected facility enclosed in a building.
 - (2) One (1) feeder hopper for incoming shale/clay, identified as AF-1 and one (1) raw shale storage conveyor, identified as C2W, where AF-1 and C2W are uncovered and inside the building, capacity: 175 tons per hour, each. A dribble belt C1D is located beneath AF1 to catch shale spillage that is rerouted to C2W. C1D is covered and located inside the building, capacity: ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (3) Four (4) primary crusher conveyors, identified as C3, C4, C5D, and C6W and one (1) feeder hopper, identified as AF2, where C3, C4, and AF2 are uncovered and inside the building; C5D is covered and inside the building; and C6W is uncovered while inside the building and C6W is covered outside between buildings 2 and 3 and transfer points. Capacity: C3 and C4 175 tons per hour each; AF2 and C6W 110 tons per hour each; and C5D ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
- (c) Secondary Clay/shale processing operations, identified as EU1, approved in 2007 for construction, consisting of the following:
- (1) One (1) grinding room, equipped with a grinding mill, four (4) screens, and secondary crushing and screening, equipped with a dust collector, identified as CE1, exhausting to stack SC1, capacity: 94 tons per hour. Under NSPS Subpart OOO, this is an affected facility with a stack.
 - (2) Three (3) enclosed ground shale storage bins, equipped with a dust collector, identified as CE1, exhausting to stack SC1, each with a storage capacity of 200 tons, throughput: 100 tons per hour, each. Under NSPS Subpart OOO, these are affected facilities with a stack.
 - (3) Four (4) grinding room conveyors for mill and screen input, identified as C7A, C8, C9, and C7BW, where C9 is uncovered and C7A, C8, and C7BW are covered and all conveyors are located inside the building, capacity: 250 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (4) Seven (7) grinding room conveyors for fines transport to storage bins, identified as C10, C11, C12W, C13, C11A, C14AR, and C14BR; capacity: C10, C11, C12W, C13, C14AR, and C14BR are 110 tons per hour each; C11A is four (4) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (5) Six (6) grinding room conveyors for fines transport from storage bins, identified as C15W, C16W, C17W, C18, C19, and BF1; all are inside the building, where C18 is covered and C15W, C16W, C17W, C18, C19, and BF1 are uncovered, capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.

- (6) Two (2) grinding room conveyors feeding brick manufacturing operations, identified as C20W and C21, where C20W is uncovered and inside the building and C21 is covered and between buildings; capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.

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

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

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) primary raw shale crusher at EU1A shall not exceed 57.07 pounds per hour when operating at a process weight rate of 175 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) grinding room at EU1 shall not exceed 50.65 pounds per hour when operating at a process weight rate of 94 tons per hour.

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

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

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

D.1.2 PSD Minor Limit [326 IAC 2-2]

The PM, and PM₁₀, and PM_{2.5} emissions from the one (1) grinding room at EU1, and the three (3) enclosed ground shale storage bins, all exhausting to dust collector CE1, shall not exceed 0.21 pound per ton of clay/shale processed, and the amount of clay/shale processed shall be less than 823,440 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, in conjunction with Condition D.2.2 and potential non-fugitive emissions of PM, and PM₁₀, and PM_{2.5} from all other emission units at this source, shall limit source-wide non-fugitive PM, and PM₁₀, and PM_{2.5} emissions to less than 250 tons per year, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.1.1(b) and D.1.2, the dust collector, identified as CE1, for particulate control shall be in operation and control emissions from the one (1) grinding room and the three (3) enclosed ground shale storage bins at all times that the grinding room or ground shale storage bins are in operation.

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

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM, PM₁₀, and PM_{2.5} testing for the one (1) grinding room and three (3) enclosed ground shale storage bins, all equipped with a dust collector, identified as CE1, and exhausting to stack SC1, utilizing methods as approved by the Commissioner not later than once every five (5) years from the date of this the most recent valid compliance demonstration. PM₁₀ and PM_{2.5} includes filterable and condensable PM. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.1.6 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the grinding room and ground shale storage stack, SC1, exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.7 Dust Collector Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the dust collector used in conjunction with the one (1) grinding room at EU1 and the three (3) enclosed ground shale storage bins at least once per day when the one (1) grinding room at EU1 and the three (3) ground shale storage bins are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2.5 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Bag Detection

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

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

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

D.1.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the grinding room and ground shale storage bins stack, SC1, exhaust once per day. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.7, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its records when pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.1.2, the Permittee shall maintain monthly records of the amount of clay/shale processed.
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.1.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (d) Brick manufacturing operations, approved in 2007 for construction, consisting of the following:
- (1) Extrusion, color mixing and brick cutting or setting, using enclosed wet processes.
 - (2) One (1) holding room for pre-drying, identified as EU2, using waste heat from the tunnel kiln, exhausting to stack SD1, capacity: 49,200 pounds of green brick per hour.
 - (3) One (1) brick tunnel dryer, identified as EU3, using waste heat from the tunnel kiln, exhausting to stacks SD2 and SD3, capacity: 49,200 pounds of green brick per hour.
 - (4) One (1) tunnel kiln, identified as EU6, using 30% to 40% natural gas and 60% to 70% petcoke, modified in 2009 for burning 100% natural gas, equipped with a scrubber and dry lime injection baghouse combination, identified as CE2, exhausting to stack SK1, capacity: 49,200 pounds of brick per hour.
 - (5) One (1) lime silo, identified as EU7, used to scrub SO₂, HF and HCl from lime exhaust, receiving exhaust via enclosed airway, equipped with a baghouse, identified as CE5, exhausting to vent V2, with a storage capacity of 3,700 cubic feet and a throughput capacity of 0.475 tons per hour and 4,161 tons per year.

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

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

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) tunnel kiln, identified as EU6, shall not exceed 35.05 pounds per hour when operating at a process weight rate of 24.6 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) lime silo, identified as EU7, shall not exceed 2.49 pounds per hour when operating at a process weight rate of 0.475 tons per hour.

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

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:

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

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

- (a) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 9.67 and 7.11 pounds per hour, respectively, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.
- (b) Alternate Operating Scenario (AOS)

- (1) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 35.05 pounds per hour, each, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.
- (2) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The amount of fired product shall be less than 215,496 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, in conjunction with Condition D.1.2 and potential non-fugitive emissions of PM and PM₁₀ from all other emission units at this source, shall limit source-wide non-fugitive PM and PM₁₀ emissions to less than 250 tons per year, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable.

D.2.3 PSD Minor Limit [326 IAC 2-2]

- (a) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 54.79 pounds per hour, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.
- (b) Alternate Operating Scenario (AOS)
 - (1) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 54.79 pounds per hour, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.
 - (2) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The amount of fired product shall be less than 215,496 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, in conjunction with SO₂ emissions from all other emission units at this source, shall limit source-wide SO₂ emissions to less than 250 tons per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

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

A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.5 Particulate and Sulfur Dioxide Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.2.1(a), D.2.2(a) and D.2.3(a), the scrubber and dry lime injection baghouse combination, identified as CE2, for particulate and SO₂ control shall be in operation and control emissions from the one (1) tunnel kiln, identified as EU6, at all times that the tunnel kiln is in operation except when operating under the Alternative Operating Scenario (AOS).

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

D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.2.1(a) and D.2.2(a), the Permittee shall perform PM and PM₁₀ testing for using 100% natural gas fuel for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM₁₀ includes filterable and condensable PM.
- (b) No later than 180 days after the issuance of Part 70 Operating Permit Renewal No. T153-30898-00033, in order to demonstrate compliance with D.2.1(a), the Permittee shall perform uncontrolled PM testing for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (c) In order to demonstrate compliance with Conditions D.2.1(a) and D.2.2(a), the Permittee shall perform PM and PM₁₀ testing for using a petcoke and natural gas fuel mixture for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner. These testing shall be performed not later than ninety (90) days of beginning to combust a petcoke / natural gas mixture or at least once every five (5) years from the date of the most recent valid compliance demonstration, whichever is later. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM₁₀ includes filterable and condensable PM.

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

D.2.7 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the tunnel kiln stack, SK1, exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

D.2.8 Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the scrubber and dry lime injection baghouse combination used in conjunction with the one (1) tunnel kiln at least once per day when the tunnel kiln is in operation and the tunnel kiln is vented to the scrubber and dry lime injection baghouse combination. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 5.5 and 7.5 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.
- (c) The Permittee shall continuously monitor the dry lime feed rate at the one (1) lime injection baghouse when the tunnel kiln is in operation and the tunnel kiln is vented to the dry lime injection baghouse. The Permittee shall maintain the dry lime feed rate at or above 120.5 pounds per hour until a new minimum feed rate is established during the latest valid performance test, while combusting a mixture of petcoke and natural gas. The Permittee shall maintain the dry lime feed rate at or above 38.6 pounds per hour while combusting 100% natural gas until a new minimum feed rate is established during the latest valid performance test. If the feed rate falls below the minimum feed rate observed during the latest compliant stack test, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is below the minimum feed rate observed during the latest compliant stack test is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (d) The Permittee shall inspect the dry lime feed system and feeder setting on the dry lime injection baghouse once per day. If the lime feeder setting drops below the level established during the latest valid performance test, the switches monitoring the interlock system on the limestone delivery systems, including the lime screw conveyor and holding bin, are not functioning properly, or the Permittee discovers cracks, holes or abnormal/excessive wear on the indicators for the screw conveyor and holding bin, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A feeder setting that is below the level established during the latest performance test is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.2.9 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the

event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the tunnel kiln stack, SK1, exhaust once per day. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.2.8, the Permittee shall maintain records once per day of the pressure drop and feeder setting, continuous records of the dry lime feed rate, and daily records of the type of fuel used (100% natural gas or a mixture of petcoke and natural gas). The Permittee shall include in its records when a reading is not taken and the reason for the lack of reading, (e.g. the process did not operate that day).
- (c) To document the compliance status with Conditions D.2.2(c) and D.2.3(c), the Permittee shall maintain monthly records of the amount of fired product through the one (1) tunnel kiln.
- (d) To document the compliance status with Conditions D.2.2(b)(2) and D.2.3(b)(2), the Permittee shall maintain records of the dates and time when the emissions from the tunnel kiln bypass the scrubber and dry lime injection baghouse combination, identified as CE2.
- (e) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.2.11 Reporting Requirements

- (a) A quarterly summary of the information to document the compliance status with Conditions D.2.2(b)(2) and (c), and D.2.3(b)(2) and (c) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The natural gas certification shall be submitted not later than thirty (30) days after the end of the six (6) month period being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The natural

gas certification does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY OPERATION CONDITIONS

Emissions Unit Description: Petcoke Handling

- (e) Petcoke operations, approved in 2007 for construction in 2007, consisting of the following:
- (1) One (1) petcoke grinding operation, identified as EU4, equipped with a baghouse, identified as CE3, exhausting to stack SG1, capacity: 1,947 pounds of petcoke per hour.
 - (2) One (1) petcoke storage silo, identified as EU5, receiving petcoke via an enclosed airway, equipped with a baghouse, identified as CE4, exhausting to vent V1, with a storage capacity of 3,040 cubic feet, and a throughput capacity of 0.97 tons per hour and 5,842 tons per year.
 - (3) One (1) petcoke dosing silo, identified as EU11, receiving petcoke via an enclosed airway, equipped with a baghouse, identified as CE9, exhausting to vent V6, with a storage capacity of 3,040 cubic feet, and a throughput capacity of 0.97 tons per hour and 5,842 tons per year.

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

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

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) petcoke grinding operation, identified as EU4, shall not exceed 4.03 pounds per hour when operating at a process weight rate of 0.9735 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) petcoke storage silo, identified as EU5, shall not exceed 4.02 pounds per hour when operating at a process weight rate of 0.97 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) petcoke dosing silo, identified as EU11, shall not exceed 4.02 pounds per hour when operating at a process weight rate of 0.97 tons per hour.

The pounds per hour limitations were 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:

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Clay/Shale Processing

- (b) Primary Clay/shale processing operations, identified as EU1A, approved in 2007 for construction, consisting of the following:
- (1) One (1) primary raw shale crusher (Jaw Crusher) (EU1A), totally enclosed within building 2, capacity: 175 tons per hour. Under NSPS Subpart OOO, this is an affected facility enclosed in a building.
 - (2) One (1) feeder hopper for incoming shale/clay, identified as AF-1 and one (1) raw shale storage conveyor, identified as C2W, where AF-1 and C2W are uncovered and inside the building, capacity: 175 tons per hour, each. A dribble belt C1D is located beneath AF1 to catch shale spillage that is rerouted to C2W. C1D is covered and located inside the building, capacity: ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (3) Four (4) primary crusher conveyors, identified as C3, C4, C5D, and C6W and one (1) feeder hopper, identified as AF2, where C3, C4, and AF2 are uncovered and inside the building; C5D is covered and inside the building; and C6W is uncovered while inside the building and C6W is covered outside between buildings 2 and 3 and transfer points. Capacity: C3 and C4 175 tons per hour each; AF2 and C6W 110 tons per hour each; and C5D ten (10) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
- (c) Secondary Clay/shale processing operations, identified as EU1, approved in 2007 for construction, consisting of the following:
- (1) One (1) grinding room, equipped with a grinding mill, four (4) screens, and secondary crushing and screening, equipped with a dust collector, identified as CE1, exhausting to stack SC1, capacity: 94 tons per hour. Under NSPS Subpart OOO, this is an affected facility with a stack.
 - (2) Three (3) enclosed ground shale storage bins, equipped with a dust collector, identified as CE1, exhausting to stack SC1, each with a storage capacity of 200 tons, throughput: 100 tons per hour, each. Under NSPS Subpart OOO, these are affected facilities with a stack.
 - (3) Four (4) grinding room conveyors for mill and screen input, identified as C7A, C8, C9, and C7BW, where C9 is uncovered and C7A, C8, and C7BW are covered and all conveyors are located inside the building, capacity: 250 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (4) Seven (7) grinding room conveyors for fines transport to storage bins, identified as C10, C11, C12W, C13, C11A, C14AR, and C14BR; capacity: C10, C11, C12W, C13, C14AR, and C14BR are 110 tons per hour each; C11A is four (4) tons per hour. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.
 - (5) Six (6) grinding room conveyors for fines transport from storage bins, identified as C15W, C16W, C17W, C18, C19, and BF1; all are inside the building, where C18 is covered and C15W, C16W, C17W, C18, C19, and BF1 are uncovered, capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.

- (6) Two (2) grinding room conveyors feeding brick manufacturing operations, identified as C20W and C21, where C20W is uncovered and inside the building and C21 is covered and between buildings; capacity: 110 tons per hour, each. Under NSPS Subpart OOO, these are conveyors with transfer points enclosed in a building.

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

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

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

Pursuant to 40 CFR 60.670, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12 for the clay/shale processing operations, identified as EU1, as specified in Table 1 of 40 CFR Part 60, Subpart OOO in accordance with schedule in 40 CFR 60 Subpart OOO.

E.1.2 NSPS Subpart OOO Requirements [40 CFR Part 60, Subpart OOO] [326 IAC 12]

Pursuant to CFR Part 60, Subpart OOO, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as 'Attachment B'), which are incorporated by reference as 326 IAC 12 for the clay/shale processing operations, identified as EU1:

- (1) 40 CFR 60.670 (a)(1), (e) and (f)
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672 (a), (b), (d) and (e)
- (4) 40 CFR 60.675 (a), (b), (c)(1)(i) and (ii), (d), (e) and (g)
- (5) 40 CFR 60.676 (f), (i)(1) and (j)

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

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS TUNNEL KILN CERTIFICATION**

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033

Natural Gas Only
 Alternate Fuel burned
From: _____ To: _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033
Facility: One (1) grinding room at EU1 and three (3) enclosed ground shale storage bins
Parameter: Amount of clay/shale processed
Limit: Less than 823,440 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER:

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033
Facility: Scrubber and dry lime injection baghouse combination, identified as CE2
Parameter: Hours of Bypass
Limit: Maximum of 461 hours per twelve (12) consecutive month period

QUARTER:

YEAR:

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

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033
Facility: One (1) tunnel kiln, identified as EU6
Parameter: Amount of fired product through the one (1) tunnel kiln.
Limit: Less than 215,496 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER:

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Brampton Brick, Inc.
Source Address: 1256 E CR 950 N, Farmersburg, Indiana 47850
Part 70 Permit No.: T153-30898-00033

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Attachment A
to Part 70 Operating Permit No. T153-30898-00033**

Brampton Brick
1256 E. CR 950 N
Farmersburg, Indiana 47850

FUGITIVE DUST CONTROL PLAN

This PM Fugitive Dust Control Plan has been prepared by Patriot Engineering and Environmental, Inc. (Patriot) on behalf of Brampton Brick in accordance to 326 IAC 6-5-5.

Facility: Brampton Brick, Inc.
 1256 E CR 950 N
 Sullivan County
 Farmersburg, Indiana 47850

The Facility Operator responsible for the implementation of the plan is the same as listed above.

QUARRY

Processes covered by the plan include: Quarry roads, truck traffic for hauling of shale/clay from the quarry to the production facility, outdoor aggregate piles (PILE-1; PILE-2), 3-sided bunker located between buildings B3 and B4 (BUNK-1), loading and unloading bins, and covered outside conveyors.

Figures 1 and 2 show the roads, quarry, transfer points and covered outside conveyors. The average number of 34-ton hauling trucks to be on unpaved roads (fired brick is base of these roads) at any time would be one (1) truck at a time. Hauling operations will occur 8 hours-a-day for 5 days-a-week. The trucks will haul about 120 tons of shale per hour (4 to 6 trips per hour).

All quarry roads have been built with fired bricks as their base to minimize dust formation. As new quarry roads are formed, they are also built with fired bricks as their base. Water trucks will be used to wet the quarry roads, as necessary, to keep visible emissions to a minimum. Records of the frequency and type of dust suppression will be maintained in plant files. (See Figure 1) Operations in the quarry are generally 5 days-a-week.

OUTDOOR RAW MATERIAL STORAGE PILE-1

The shale/clay (raw materials) temporary outdoor storage piles (PILE-1) are constructed of concrete flooring with concrete bricks for walls to reduce wind erosion of the raw material piles. A 34-ton haul truck releases the raw materials inside this outdoor storage area. The piles are located outside near Buildings B1 and B2 and contain 25% moisture, which also aids in controlling dust. Each outdoor pile is cleaned around its perimeter on an as needed basis. The outdoor pile(s) are informally inspected daily when they are present. A front end loader is used to move the raw materials from the pile into the Apron Feeder (AF-1) in Building B1 to be processed through primary and secondary crushing by the end of the 8- to 12-hour day, when in operation. Because the piles are used as raw materials in brick manufacturing, Brampton cannot apply effective oil or other dust suppressant to these piles. These piles are moved quickly into the grinding process.

If the plant were operating at maximum capacity, 175,200 tons of shale/clay per year would be processed quickly from these raw material piles into the Apron Feeder (AF1 in building B1) to go through the grinding process then onto brick manufacturing. Currently, operations in the quarry are generally 5 days-a-week.

OUTDOOR WASTE STORAGE PILE-2

The waste storage pile (PILE-2) consists of moist broken green brick chunks that are about 4 inches in diameter. The outer layer keeps the pile at least 14% moist. The waste green brick is either used back in

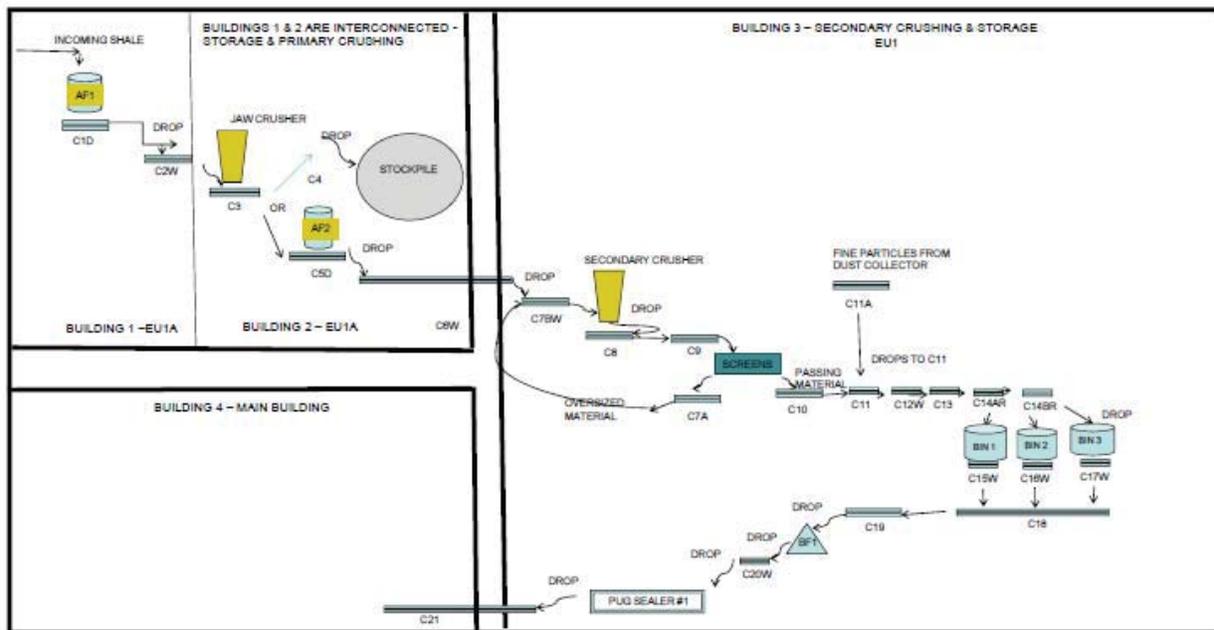
the production process or it goes back to the quarry. The waste brick would be rendered useless if it were sprayed with effective oil or dust suppressants, other than a light water spray. The largest quantity of waste green brick stored as an outdoor pile is 6,000 tons of waste green brick per year. The average storage amount is 3,000 tons.

OUTDOOR STORAGE BUNKER (BUNK-1)

The outdoor storage bunker (BUNK-1) located outside against the north-exterior wall of building B1 and beneath covered conveyor C21, contains waste green brick and is at least 25% moist and it is protected from wind erosion by the 3 concrete walls and above conveyor. The moist material is removed via a front-end loader (1) into the production process or (2) into the waste storage pile (PILE-2), where it will eventually be taken back to the quarry.

INDOOR STOCKPILE STORAGE OF RAW MATERIALS (PILE-3)

A stockpile of oversized raw materials (PILE-3) uses the concrete floor inside building B2 and has large concrete brick walls. The pile is protected from wind erosion because of its structure and location. Perimeters of the pile are inspected daily during operations. The operator has a choice of (1) routing the raw materials from the apron feeder AF2 into building 3 via conveyor C6W where secondary crushing (Stedman) and screening takes place or (2) the operator can divert the raw materials to the storage pile (PILE-3) in building B2, where it is awaiting secondary crushing and screening. Maximum through put is 70,000 tons of shale/clay per year.



D=dibble belt
 W=weigh belt
 AF=Apron feeder
 BF=Belt feeder

Figure 3C - Process Flow Diagram Conveyors in Grinding Process
 Brampton Brick
 Farmersburg, Indiana
 Admin Amend # 163-26928-00033 for Permit # T153-24040-00033



Attachment B
to Part 70 Operating Permit No. T153-30898-00033

Brampton Brick
1256 E. CR 950 N
Farmersburg, Indiana 47850

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

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

§ 60.670 Applicability and designation of affected facility.

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.671 Definitions.

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

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

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

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

Building means any frame structure with a roof.

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

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

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

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

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

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

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

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

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

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid

energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

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

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

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

(2) Sand and Gravel.

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

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

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

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

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

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.672 Standard for particulate matter (PM).

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

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

(c) [Reserved]

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

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

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

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

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

§ 60.673 Reconstruction.

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

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will

be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

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

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

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

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

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

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

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

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

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record

each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

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

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

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

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

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

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

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

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

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

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

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific

monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

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

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

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

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

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

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

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

(ii) Sealing off defective bags or filter media;

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

(iv) Sealing off a defective fabric filter compartment;

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

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

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

§ 60.675 Test methods and procedures.

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial

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

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

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

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

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

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

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

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

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

(3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

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

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

Where:

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

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

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

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

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

(h) [Reserved]

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

§ 60.676 Reporting and recordkeeping.

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

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

- (i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and
- (ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

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

(3) For a conveyor belt:

- (i) The width of the existing belt being replaced and
- (ii) The width of the replacement conveyor belt.

(4) For a storage bin:

- (i) The rated capacity in megagrams or tons of the existing storage bin being replaced and
- (ii) The rated capacity in megagrams or tons of replacement storage bins.

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

hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

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

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

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

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

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

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

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

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

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

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

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

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

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The

notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

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

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

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

Table 1 to Subpart 000 of Part 60—Exceptions to Applicability of Subpart A to Subpart 000

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

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

Table 2 to Subpart 000 of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

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

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

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

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

Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits

Table 3 to Subpart OOO—Fugitive Emission Limits

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

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

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

Source Description and Location

Source Name:	Brampton Brick, Inc.
Source Location:	1256 E CR 950 N, Farmersburg, Indiana 47850
County:	Sullivan
SIC Code:	3251
Operation Permit No.:	T 153-30898-00033
Operation Permit Issuance Date:	July 12, 2012
Significant Permit Modification No.:	153-32149-00033
Permit Reviewer:	Kristen Willoughby

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T153-30898-00033 on July 12, 2012.

County Attainment Status

The source is located in Sullivan County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Sullivan County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM_{2.5}

Sullivan County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant

level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Sullivan County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

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

Pollutant	Emissions (ton/yr)
PM	152.77
PM ₁₀	152.862
SO ₂	119.00
VOC	10.10
CO	99.10
NO _x	49.80
GHGs as CO ₂ e	43,099
Total HAPs	>25
Single HAP	>10

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more, emissions of GHGs are less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) These emissions are based upon the Technical Support Document for Part 70 operating Permit Renewal No. T153-30898-00033.

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

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Brampton Brick, Inc. on July 26, 2012, relating to the modification of existing testing and PSD minor limits. The following is a list of the proposed changes:

- (a) Modify the testing requirements for tunnel kiln EU6 such that testing is only required once every five (5) years for 100% natural gas combustion and either once every five (5) years

from the last valid stack test for a petcoke / natural gas mixture or within ninety (90) days of beginning to combust a petcoke / natural gas mixture, whichever is later.

- (b) Modify the PSD minor limits for the tunnel kiln EU6 to allow more flexibility, and add PM2.5 to grinding room EU1 to ensure PSD minor status.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

The calculations reflect the source-wide calculations from the Part 70 Operating Permit Renewal No. T153-30898-00033, as updated to reflect changes made as part of this permitting action.

Permit Level Determination – Part 70

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

There is no increase in the potential to emit of any regulated pollutants associated with this modification. This modification is not subject to the source modification requirements under 326 IAC 2-7-10.5. The changes will be incorporated into the permit as a Significant Permit Modification under 326 IAC 2-7-12(d), because it does involve a case-by-case determination of an emission limitation and a significant change to existing monitoring.

Permit Level Determination – PSD

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

Process / Emission Unit	Potential to Emit (ton/yr)							
	PM	PM ₁₀	PM _{2.5} *	SO ₂	VOC	CO	NO _x	GHGs
Quarry Operations - Fugitive	266.89	78.78	7.95	-	-	-	-	-
Clay & Shale Operations	91.39	86.91	86.91	-	-	-	-	-
Brick Manufacturing Operations	48.20	37.58	93.74	240.00	9.05	129.30	54.95	43,099
Clay/Shale Processing Conveyors	48.09	17.63	17.63	-	-	-	-	-
Storage Silos & Petcoke Processing	38.19	18.55	18.55	-	-	-	-	-
Color & Barium Tanks	0.06	0.03	0.03	-	-	-	-	-
Parting Agent Hopper	0.16	0.15	0.15	-	-	-	-	-
Gasoline / Diesel Storage Tanks (conservative estimate)	-	-	-	-	1.00	-	-	-
Pile 3	0.24	0.12	0.12	-	-	-	-	-
Pile 1 & 2 - Fugitive	1.24	0.60	0.60	-	-	-	-	-
Wind Erosion from Pile 1 and 2 - Fugitive	0.79	0.28	0.28	-	-	-	-	-
Total for Source	226.34	160.98	217.14	240.00	10.05	129.30	54.95	43,099
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO₂e

*PM_{2.5} listed is direct PM_{2.5}.

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

The unrestricted potential to emit of this source is greater than 250 tons per year of PM, PM₁₀, and PM_{2.5}, therefore this source has elected to limit the potential to emit of the source as follows:

PM, PM₁₀, and PM_{2.5}

- (a) The PM, and PM₁₀, and PM_{2.5} emissions from the one (1) grinding room at EU1, and the three (3) enclosed ground shale storage bins, all exhausting to dust collector CE1, shall not exceed 0.21 pound per ton of clay/shale processed, and the amount of clay/shale processed shall be less than 823,440 tons per twelve consecutive month period, with compliance determined at the end of each month.
- (b) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 9.67 and 7.11 pounds per hour, respectively, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.
- (c) Alternate Operating Scenario (AOS)
 - (1) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 35.05 pounds per hour, each, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.
 - (2) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The amount of fired product shall be less than 215,496 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, in conjunction with potential non-fugitive emissions of PM, PM₁₀, and PM_{2.5} from all other emission units at this source, shall limit source-wide non-fugitive PM,

PM₁₀, and PM_{2.5} emissions to less than 250 tons per year, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable.

SO₂

While the calculated unrestricted potential to emit of this source is less than 250 tons per year of SO₂ per year, due to the high fluctuations in sulfur content of the material processed, the source is required to limit the potential to emit of sulfur as follows:

- (a) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 54.79 pounds per hour, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.
- (b) Alternate Operating Scenario (AOS)
 - (1) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 54.79 pounds per hour, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.
 - (2) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The amount of fired product shall be less than 215,496 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, in conjunction with SO₂ emissions from all other emission units at this source, shall limit source-wide SO₂ emissions to less than 250 tons per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

Federal Rule Applicability Determination

There is no change in the federal rule applicability to the source due to this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

This source has modified its limits to be a PSD minor source as part of this modification. The revised limits are discussed under the Permit Level Determination – PSD section.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds

for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Changes to the compliance determination and monitoring requirements are detailed in the Proposed Changes section of this document.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T153-30898-00033. Some of these revisions are considered Title I changes. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Summary of IDEM / OAQ Model Updates for Section A, B, C, and D

- (a) Section A.2 and the facility description boxes have been updated to clarify when construction approval was given.
- (b) On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section C - Risk Management Plan, the Facility Descriptions, and Section D - Preventative Maintenance Plan.
- (c) For clarity, IDEM, OAQ has changed references to the general conditions such as "in accordance with Section B", "in accordance with Section C", or other similar language to "Section C...contains the Permittee's obligation with regard to the records required by this condition.
- (d) IDEM, OAQ has decided to clarify Section D - Testing Requirements.
- (e) The word "status" has been added to the Record Keeping Requirements and Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.
- (f) IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than".
- (g) IDEM, OAQ has included the replacement of an instrument as an acceptable action in the Parametric Monitoring Conditions.
- (h) IDEM, OAQ has decided to clarify what rule requirements a certification needs to meet.

Revisions Specific to This Permittee

- (i) The general source phone number in Section A.1 has been corrected.
- (j) It was determined in Part 70 Operating Permit Renewal (T153-30898-00033) that the requirements of 40 CFR 64 (CAM) was applicable to the Grinding Room, identified as CE1, and the tunnel kiln, identified as EU6. The requirements of 40 CFR 64 (CAM) are being incorporated as part of this modification.
- (k) A PM2.5 limit was added to Condition D.1.2 for the grinding room EU1 and three enclosed ground shale storage bins to ensure the source is minor under PSD. Associated testing was added to Condition D.1.5.

- (l) The PSD minor limits in Conditions D.2.2 and D.2.3 were modified. Associated testing in condition D.2.6 was updated.
- (m) Condition D.2.5 was modified to account for the different operating scenarios permitted.
- (n) Condition D.2.6 was modified so the Permittee only has to test the petcoke / natural gas fuel combination if the fuel has been used in a five year period or with in 90 days of beginning to use the fuel mixture, whichever is later.

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

The Permittee owns and operates a stationary brick manufacturing source.

Source Address:	1256 E CR 950 N, Farmersburg, Indiana 47850
General Source Phone Number:	(812) 2397 -2190
SIC Code:	3251
County Location:	Sullivan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) quarry, approved **in 2007** for construction ~~in 2007~~, capacity: 350,000 pounds of shale per hour.
- (b) Primary Clay/shale processing operations, identified as EU1A, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

- (c) Secondary Clay/shale processing operations, identified as EU1, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

- (d) Brick manufacturing operations, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

- (e) Petcoke operations, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

C.14 Risk Management Plan [326 IAC 2-7-5(1211)] [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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Clay/shale Processing

- (b) Primary Clay/shale processing operations, identified as EU1A, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

- (c) Secondary Clay/shale processing operations, identified as EU1, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

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

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

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

D.1.2 PSD Minor Limit [326 IAC 2-2]

The PM, ~~and~~ PM₁₀, **and** PM_{2.5} emissions from the one (1) grinding room at EU1, and the three (3) enclosed ground shale storage bins, all exhausting to dust collector CE1, shall not exceed 0.21 pound per ton of clay/shale processed, and the amount of clay/shale processed shall be less than 823,440 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, in conjunction with Condition D.2.2 and potential non-fugitive emissions of PM, ~~and~~ PM₁₀, **and** PM_{2.5} from all other emission units at this source, shall limit source-wide non-fugitive PM, ~~and~~ PM₁₀, **and** PM_{2.5} emissions to less than 250 tons per year, each. Therefore, ~~this is a minor source under the requirements of 326 IAC 2-2 (PSD) are~~ **rendered not applicable.**

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(4312)]

A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Particulate Control [326 IAC 2-7-6(6)]

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM, ~~and~~ PM₁₀, **PM**_{2.5} testing for the one (1) grinding room and three (3) enclosed ground shale storage bins, all equipped with a dust collector, identified as CE1, and exhausting to stack SC1, utilizing methods as approved by the Commissioner. ~~The testing shall be performed no later than five (5) years from the date of the most recent valid compliance demonstration. The test shall be repeated at least not later than~~ **once every five (5) years from the date of this the most recent valid compliance demonstration.** PM₁₀ **and** PM_{2.5} includes filterable and condensable PM. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling

Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

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

D.1.6 Visible Emissions Notations [40 CFR 64]

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

D.1.7 Dust Collector Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the dust collector used in conjunction with the one (1) grinding room at EU1 and the three (3) enclosed ground shale storage bins at least once per day when the one (1) grinding room at EU1 and the three (3) ground shale storage bins are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~2.5 and 7.0 inches of water or a range established during the latest stack test~~, the Permittee shall take a reasonable response steps. **The normal range for this unit is a pressure drop between 2.5 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

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

D.1.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the grinding room and ground shale storage bins stack, SC1, exhaust once per day. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.7, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its records when pressure drop reading is not taken and the reason for the **lack of a** pressure drop reading, (e.g. the process did not operate that day).

D.1.10 Reporting Requirements

A quarterly summary of the information to document **the** compliance **status** with Condition 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 not later than~~ thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required

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

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(~~4514~~)]: Brick Manufacturing

(d) Brick manufacturing operations, approved **in 2007** for construction ~~in 2007~~, consisting of the following:

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

(a) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed ~~0.12 and 0.36~~ **9.67 and 7.11** pounds per ~~ton of fired product~~ **hour**, respectively, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.

(b) Alternate Operating Scenario (AOS)

(1) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed 35.05 pounds per hour, each, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.

(e2) The PM and PM₁₀ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

(dc) The amount of fired product shall be less than 215,496 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, in conjunction with Condition D.1.2 and potential non-fugitive emissions of PM and PM₁₀ from all other emission units at this source, shall limit source-wide non-fugitive PM and PM₁₀ emissions to less than 250 tons per year, each. Therefore, ~~this is a minor source under the requirements of 326 IAC 2-2 (PSD) are rendered not applicable.~~

D.2.3 PSD Minor Limit [326 IAC 2-2]

(a) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed ~~2.34~~ **54.79** pounds per ~~hour, ton of fired product~~ **hour**, when ducted through the scrubber and dry lime injection baghouse combination, identified as CE2.

(b) Alternate Operating Scenario (AOS)

(1) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not exceed ~~4.69~~ **54.79** pounds per ~~ton of fired product~~ **hour**, when bypassing the scrubber and dry lime injection baghouse combination, identified as CE2.

(e2) The SO₂ emissions from the one (1) tunnel kiln, identified as EU6, shall not bypass the scrubber and dry lime injection baghouse combination, identified as

CE2, more than 461 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

- (dc) The amount of fired product shall be less than 215,496 tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, in conjunction with ~~non-fugitive~~ SO₂ emissions from all other emission units at this source, shall limit source-wide ~~non-fugitive~~ SO₂ emissions to less than 250 tons per year. ~~Therefore, this is a minor source under 326 IAC 2-2, and therefore will render the requirements of 326 IAC 2-2 not applicable.~~

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(4312)]

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

D.2.5 Particulate and Sulfur Dioxide Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.2.1(a), D.2.2(a) and D.2.3(a), the scrubber and dry lime injection baghouse combination, identified as CE2, for particulate and SO₂ control shall be in operation and control emissions from the one (1) tunnel kiln, identified as EU6, at all times that the tunnel kiln is in operation **except when operating under the Alternative Operating Scenario (AOS).**

- (b) ***

D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.2.1(a), **and D.2.2(a) and D.2.3(a), no later than five (5) years of the most recent testing performed for PM and SO₂, the Permittee shall perform PM₇ and PM₁₀ and SO₂ testing for using 100% natural gas fuel** for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner. ~~These testing shall be repeated at least once every five (5) years from the date of this the most recent valid compliance demonstration. Testing shall be conducted in accordance with~~ **the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.** PM₁₀ includes filterable and condensable PM.
- (b) No later than 180 days after the issuance of Part 70 Operating Permit Renewal No. T153-30898-00033, in order to demonstrate compliance with D.2.1(a), the Permittee shall perform uncontrolled PM testing for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**
- (c) In order to demonstrate compliance with Conditions D.2.1(a) and D.2.2(a), the Permittee shall perform PM and PM₁₀ testing for using a petcoke and natural gas fuel mixture for the one (1) tunnel kiln, identified as EU6, utilizing methods as approved by the Commissioner. **These testing shall be performed not later than ninety (90) days of beginning to combust a petcoke / natural gas mixture or at least once every five (5) years from the date of the most recent valid compliance demonstration, whichever is later. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.** PM₁₀ includes filterable and condensable PM.

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

D.2.7 Visible Emissions Notations [40 CFR 64]

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

D.2.8 Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the scrubber and dry lime injection baghouse combination used in conjunction with the one (1) tunnel kiln at least once per day when the tunnel kiln is in operation and the tunnel kiln is vented to the scrubber and dry lime injection baghouse combination. When for any one reading, ~~the pressure drop across the baghouse is outside the normal range of 5.5 and 7.5 inches of water or a range established during the latest stack test,~~ the Permittee shall take a reasonable response steps. **The normal range for this unit is a pressure drop between 5.5 and 7.5 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.** Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.
- (c) The Permittee shall continuously monitor the dry lime feed rate at the one (1) lime injection baghouse when the tunnel kiln is in operation and the tunnel kiln is vented to the dry lime injection baghouse. ~~When~~ **The Permittee shall maintain** the dry lime feed rate ~~is below at or above 120.5 pounds per hour or until a new minimum feed rate is a limit established during the latest valid performance test,~~ while combusting a mixture of petcoke and natural gas. **The Permittee shall maintain the dry lime feed rate or below at or above 38.6 pounds per hour while combusting 100% natural gas or a limit until a new minimum feed rate is established during the latest valid performance test.** **If the feed rate falls below the minimum feed rate observed during the latest compliant stack test, the** Permittee shall take a reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is below the ~~above mentioned feed rate~~ **minimum feed rate observed during the latest compliant stack test** is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (d) The Permittee shall inspect the dry lime feed system and feeder setting on the dry lime injection baghouse once per day. If the lime feeder setting drops below the level established during the latest **valid** performance test, the switches monitoring the interlock system on the limestone delivery systems, including the lime screw conveyor and holding bin, are not functioning properly, or the Permittee discovers cracks, holes or abnormal/excessive wear on the indicators for the screw conveyor and holding bin, the Permittee shall take a reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A feeder setting that is below the level

established during the latest performance test is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.2.9 Broken or Failed Bag Detection

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

D.2.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the tunnel kiln stack, SK1, exhaust once per day; ~~or a record of the reason why the visible emission notations were not taken.~~ The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.2.8, the Permittee shall maintain records once per day of the pressure drop and feeder setting, continuous records of the dry lime feed rate, and daily records of the type of fuel used (100% natural gas or a mixture of petcoke and natural gas). The Permittee shall include in its records when a reading is not taken and the reason for the lack of reading, (e.g. the process did not operate that day).
- (c) To document the compliance status with Conditions D.2.2(~~dc~~) and D.2.3(~~dc~~), the Permittee shall maintain monthly records of the amount of fired product through the one (1) tunnel kiln.
- (d) To document the compliance status with Conditions D.2.2(~~e~~)(b)(2) and D.2.3(~~e~~)(b)(2), the Permittee shall maintain records of the dates and time when the emissions from the tunnel kiln bypass the scrubber and dry lime injection baghouse combination, identified as CE2.
- (e) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.2.11 Reporting Requirements

- (a) A quarterly summary of the information to document **the compliance status** with Condition D.2.2(~~e~~)(b)(2) and (~~dc~~), and D.2.3(~~e~~)(b)(2) and (~~dc~~) 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 not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The natural gas certification 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 its equivalent,~~ **within not later than** thirty (30) days after the end of the six (6) month period being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The natural gas certification does require ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)** by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(4514)]: Petcoke Handling

(e) Petcoke operations, approved in **2007** for construction ~~in 2007~~, consisting of the following:

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

SECTION E.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Clay/shale Processing

(b) Primary Clay/shale processing operations, identified as EU1A, approved in **2007** for construction ~~in 2007~~, consisting of the following:

(c) Secondary Clay/shale processing operations, identified as EU1, approved in **2007** for construction ~~in 2007~~, consisting of the following:

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

Conclusion and Recommendation

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 153-32149-00033. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Kristen Willoughby at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3031 or toll free at 1-800-451-6027 extension (3-3031).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Potential Emission Calculations
Quarry Operations**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

Potential To Emit (tons/yr)	PM	PM10	PM2.5	SO2	VOC	NOx	CO	GHGs	Total HAPs
Quarry Operations	266.89	78.78	7.95	-	-	-	-	-	-
Clay and Shale Operation	3504.55	218.66	218.66	-	-	-	-	-	-
Brick Manufacturing Operation	193.95	150.85	93.74	129.30	9.05	54.95	129.30	43099.20	59.33
Clay/Shale Processing Conveyor	53.35	19.56	19.56	-	-	-	-	-	-
Storage Silos and Petcoke Processing	38.19	18.55	18.55	-	-	-	-	-	-
Color & barium tanks in color mixing room	0.06	0.03	0.03	-	-	-	-	-	-
Parting Agent Hopper EU13	0.16	0.15	0.15	-	-	-	-	-	-
Pile 3	0.24	0.12	0.12	-	-	-	-	-	-
Pile 1 and 2	1.24	0.60	0.60	-	-	-	-	-	-
Wind Erosion from PILE-1 and PILE-2	0.79	0.28	0.28	-	-	-	-	-	-
Total Without Fugitives	3790.49	407.92	350.81	129.30	9.05	54.95	129.30	43099.20	59.33
Total With Fugitives	4059.42	487.58	359.64	129.30	9.05	54.95	129.30	43099.20	59.33

Limited Potential To Emit (tons/yr)	PM	PM10	PM2.5	SO2	VOC	NOx	CO	GHGs	Total HAPs
Quarry Operations	266.89	78.78	7.95	-	-	-	-	-	-
Clay and Shale Operation	91.39	86.91	86.91	-	-	-	-	-	-
Brick Manufacturing Operation	48.20	37.58	93.74	240.00	9.05	54.95	129.30	43099.20	59.33
Clay/Shale Processing Conveyor	48.09	17.63	17.63	-	-	-	-	-	-
Storage Silos and Petcoke Processing	38.19	18.55	18.55	-	-	-	-	-	-
Color & barium tanks in color mixing room	0.06	0.03	0.03	-	-	-	-	-	-
Parting Agent Hopper EU13	0.16	0.15	0.15	-	-	-	-	-	-
Pile 3	0.24	0.12	0.12	-	-	-	-	-	-
Pile 1 and 2	1.24	0.60	0.60	-	-	-	-	-	-
Wind Erosion from PILE-1 and PILE-2	0.79	0.28	0.28	-	-	-	-	-	-
Total Without Fugitives	226.34	160.98	217.14	240.00	9.05	54.95	129.30	43099.20	59.33
Total With Fugitives	495.26	240.64	225.96	240.00	9.05	54.95	129.30	43099.20	59.33

**Appendix A: Potential Emission Calculations
Quarry Operations**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

**** unpaved roads ****

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

$$\begin{aligned}
 & 6 \text{ trip/hr} \times \\
 & 0.6 \text{ mile/trip} \times \\
 & 2 \text{ (round trip) } \times \\
 & 8760 \text{ hr/yr} = \qquad \qquad \qquad 63072 \text{ miles per year}
 \end{aligned}$$

PM

Method 1a:

$$\begin{aligned}
 E_f &= k \left[\frac{s}{12} \right]^{0.7} \left[\frac{W}{3} \right]^b \\
 &= 12.86 \text{ lb/mile} \\
 \text{where } k &= 4.9 \text{ (particle size multiplier for PM)} \\
 s &= 10 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.45 \text{ Constant for PM-10 and PM-30 or TSP} \\
 W &= 34 \text{ tons average vehicle weight} \\
 M &= 25.0 \text{ surface material moisture content, \% (default is 0.2 for dry)}
 \end{aligned}$$

$$E = \frac{12.86 \text{ lb/mi} \times 63072 \text{ mi/yr}}{2000 \text{ lb/ton}} = 405.54 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$\begin{aligned}
 E_{ext} &= E * \left[\frac{365-p}{365} \right] = 266.66 \text{ tons/yr} \\
 \text{where } p &= 125 \text{ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)}
 \end{aligned}$$

PM-10

Method 1a:

$$\begin{aligned}
 E_f &= k \left[\frac{s}{12} \right]^{0.9} \left[\frac{W}{3} \right]^b \\
 &= 3.80 \text{ lb/mile} \\
 \text{where } k &= 1.5 \text{ (particle size multiplier for PM-10)} \\
 s &= 10 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.45 \text{ Constant for PM-10 and PM-30 or TSP} \\
 W &= 34 \text{ tons average vehicle weight} \\
 M &= 25.0 \text{ surface material moisture content, \% (default is 0.2 for dry conditions)}
 \end{aligned}$$

$$E = \frac{3.80 \text{ lb/mi} \times 63072 \text{ mi/yr}}{2000 \text{ lb/ton}} = 119.70 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$\begin{aligned}
 E_{ext} &= E * \left[\frac{365-p}{365} \right] = 78.71 \text{ tons/yr} \\
 \text{where } p &= 125 \text{ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)}
 \end{aligned}$$

PM-2.5

Method 1a:

$$\begin{aligned}
 E_f &= k \left[\frac{s}{12} \right]^{0.9} \left[\frac{W}{3} \right]^b \\
 &= 0.38 \text{ lb/mile} \\
 \text{where } k &= 0.15 \text{ (particle size multiplier for PM-2.5)} \\
 s &= 10 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.45 \text{ Constant for PM-2.5 or TSP} \\
 W &= 34 \text{ tons average vehicle weight} \\
 M &= 25.0 \text{ surface material moisture content, \% (default is 0.2 for dry)}
 \end{aligned}$$

$$E = \frac{0.38 \text{ lb/mi} \times 63072 \text{ mi/yr}}{2000 \text{ lb/ton}} = 11.97 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$\begin{aligned}
 E_{ext} &= E * \left[\frac{365-p}{365} \right] = 7.87 \text{ tons/yr} \\
 \text{where } p &= 125 \text{ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)}
 \end{aligned}$$

Truck Unloading

Throughput (lbs/hr)	PM Emission Factor (lbs/ton)	PM10 Emission Factor (lbs/ton)	PM 2.5 Emission Factor (lbs/ton)	PTE PM (lbs/hr)	PTE PM10 (lbs/hr)	PTE PM 2.5 (lbs/hr)	PTE PM (tons/yr)	PTE PM10 (tons/yr)	PTE PM 2.5 (tons/yr)
350000	0.0003	0.0001	0.0001	0.053	0.018	0.018	0.230	0.077	0.077

Methodology

PM10 emission factor from Truck Unloading of crushed stone (SCC 3-05-020-32)
 PM emission factor is undetermined but assumed to be 3 times the PM10 factor based on the ratio of PM to PM10 from other crushed stone processes.
 PM 2.5 emission factor is assumed to equal PM 10 emission factor from Truck Unloading of crushed stone (SCC 3-05-020-32)

**Appendix A: Potential Emission Calculations
Clay and Shale Operations**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

Emission Unit
Processing Shale/Clay (EU1A)

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Potential to Emit Before Controls (lbs/hr)	Potential to Emit Before Controls (tons/yr)	Control Efficiency	Potential to Emit After Controls (lbs/hr)	Potential to Emit After Controls (tons/yr)	Limited Emissions (tons/yr)
Crusher								
PM	175	0.006431	1.13	4.93	0.0%	1.125	4.929	4.93
PM-10/2.5	175	0.00059	0.103	0.452	0.0%	0.103	0.452	0.45
Grinding and Screening								
PM	94	8.500	799.00	3499.6	98.9%	8.781	38.46	86.46
PM-10/2.5	94	0.5300	49.820	218.2	98.9%	0.548	2.40	86.46
Total								
PM			800	3505		9.91	43.4	91.4
PM-10/2.5			49.9	219		0.651	2.85	86.91

PM and PM-10 are from AP-42 Table 11.3-1 for Crushing and Grinding and Screening Operations (SCC 3-05-003-40 and 02). PM 2.5 emission factor is assumed to equal PM 10 emission factor. There is no PM emission factor for crushing. Based on the ratio of PM to PM10 from grinding and screening, the PM emission factor is assumed to be 10.9 times the PM10 emission factor. Limited emissions from the four (4) ground shale storage bins are included in the limited emissions for the clay and shale operations.

Appendix A: Potential Emission Calculations
Brick Manufacturing Operations

Company Name: **Brampton Brick, Inc.**
 Address City IN Zip: **1256 E CR 950 N, Farmersburg, IN 47850**
 Significant Permit Modification No.: **153-32149-00033**
 Reviewer: **Kristen Willoughby**
 Date: **August 30, 2012**

Emission Unit

Kiln and dryers

Pollutant	Raw Material/Brick Throughput Rate (lbs/hr)	AP-42 Emission Factor for Natural Gas (lbs/ton)	AP-42 Emission Factor for Coal (lbs/ton)	Potential to Emit Before Controls (Worst Case per Pollutant) (lbs/hr)	Potential to Emit Before Controls (lbs/hr) using 100% Natural Gas	Potential to Emit Before Controls (Worst Case per Pollutant) (tons/yr)	Potential to Emit Before Controls (tons/yr) using 100% Natural Gas	Control Efficiency	Potential to Emit After Controls (lbs/hr)	Potential to Emit After Controls (tons/yr)	Limited Emissions (lbs/hr)	Limited Emissions (tons/yr)
Pre-Dryer (EU2)												
VOC	49200	0.03	0.03	0.74	0.74	3.23	3.23	0.00%	0.74	3.23	0.74	3.23
Dryer (EU3)												
VOC	49200	0.03	0.03	0.74	0.74	3.23	3.23	0.00%	0.74	3.23	0.74	3.23
Kiln (EU6)												
PM	49200	0.96	1.80	44.28	23.62	193.95	103.44	74.00%	11.51	50.43	9.67 / 35.05	48.20
PM-10	49200	0.87	1.40	34.44	21.40	150.85	93.74	74.00%	8.95	39.22	7.11 / 35.05	37.58
PM-2.5	49200	0.87	0.87	21.40	21.40	93.74	93.74	74.00%	5.56	24.37	21.40	93.74
SO2	49200	0.67	1.20	29.52	16.48	129.30	72.19	80.00%	5.90	25.86	54.79	240.00
NOx	49200	0.35	0.51	12.55	8.61	54.95	37.71	0.00%	12.5	54.95	12.55	54.95
VOC	49200	0.02	0.02	0.59	0.59	2.59	2.59	0.00%	0.590	2.59	0.59	2.59
CO	49200	1.20	0.80	29.52	29.52	129.30	129.30	0.00%	29.5	129.30	29.52	129.30
HF	49200	0.37	0.17	9.10	9.10	39.87	39.87	95.00%	0.455	1.99	9.10	39.87
HCl	49200	0.17	NA	4.18	4.18	18.32	18.32	85.00%	0.627	2.75	4.18	18.32
All other HAPs	49200	0.01	0.004	0.26	0.26	1.14	1.14	0.00%	0.261	1.14	0.26	1.14
CO2	49200	400.00	300.00	9840.00	9840.00	43099.20	43099.20	0.00%	9840.000	43099.20	9840.00	43099.20

Methodology

PM, PM10, PM2.5, VOC, CO and NOx Emission Factors are from AP-42 Tables 11.3-1, 11.3-2, 11.3-3, 11.3-5 for a natural gas (SCC 3-05-003011), coal-fired kiln (SCC 3-05-003-13) because coal is the most similar to petcoke, and for a brick dryer with no supplemental fuel (SCC 3-05-003-50), and PM-2.5 AP-42 emission factor for natural gas (lbs/ton) is assumed to be the same as PM-10 AP-42 emission factor for natural gas.

PM and PM-10 Emission Factors include Filterable PM and PM-10 as well as Condensable Organic and Inorganic PI

PM, PM10, and SO2 limited emissions are calculated based on a worst case scenario of 461 hrs uncontrolled and 8299 hrs controlled

There are no emissions from the extrusion process because the clay/shale is moisturized with water prior to entering the extrusion process. The percent moisture is approximately 14%. According to AP-42, the emission factors for extrusion are for lines with several drop points and moisture contents of 5-9%, and the emission factors are not applicable to typical extrusion lines.

Potential to Emit Before Controls (lb/hr) = (Raw Material/Brick Throughput Rate (lbs/hr)/200 (lb/ton))*AP-42 Emission Factor for Natural Gas or coal which ever is greater (lbs/ton)

Potential to Emit Before Controls (tons/yr) = Potential to Emit Before Controls (lb/hr) *8760 (hr/yr)/2000 (lb/ton)

Appendix A: Potential Emission Calculations
Clay/shale Processing Conveyors

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

ClayShale Conveyors

Pollutant	Maximum Rate (tons/hr)	Number of Conveyors	Number of Transfer/Drop Points Per Conveyor	Emission Factor (lbs/ton)	Potential to Emit Before Controls (lbs/hr)	Potential to Emit Before Controls (tons/yr)	Control Efficiency	Potential to Emit After Controls (lbs/hr)	Potential to Emit After Controls (tons/yr)	Limited Emissions (tons/yr)
Conveying Raw Shale	175	2	1	0.00300	1.05	4.60	0.0%	1.05	4.60	4.60
PM ₁₀	175	2	1	0.001100	0.39	1.69	0.0%	0.39	1.69	1.69
PM _{10/2.5}										
Primary Crushing	100	2	1	0.00300	0.60	2.63	0.0%	0.60	2.63	2.63
PM _{10/2.5}	100	2	1	0.001100	0.22	0.96	0.0%	0.22	0.96	0.96
Grinding Room: Mill and Screen Input	250	3	1	0.00300	2.25	9.86	0.0%	2.25	9.86	9.86
PM	250	3	1	0.001100	0.83	3.61	0.0%	0.83	3.61	3.61
Grinding Room: Mill and Screen Input	250	1	5	0.00300	3.75	16.43	0.0%	3.75	16.43	16.43
PM	250	1	5	0.001100	1.38	6.02	0.0%	1.38	6.02	6.02
Grinding Room	100	10	1	0.00300	3.00	13.14	0.0%	3.00	13.14	13.14
PM _{10/2.5}	100	10	1	0.001100	1.10	4.82	0.0%	1.10	4.82	4.82
Grinding Room to Storage Bins*	100	1	4	0.00300	1.20	5.26	98.9%	0.01	0.06	*See Note*
PM	100	1	4	0.001100	0.44	1.93	98.9%	0.00	0.02	*See Note*
Grinding Room	110	1	1	0.00300	0.33	1.45	0.0%	0.33	1.45	1.45
PM	110	1	1	0.001100	0.12	0.53	0.0%	0.12	0.53	0.53
PM _{10/2.5}				PM	12.18	53.35		10.99	48.15	48.09
Totals:				PM-10/2.5	4.47	19.56		4.03	17.66	17.63

Emission factors are from AP-42, Chapter 11.19.2-2 for conveying crushed stone without controls and PM_{2.5} is assumed to equal PM₁₀ emission factor. These emission calculations are conservatively large because most of the conveyors are covered. This includes emissions from the four (4) ground shale storage bins.

*Limited emissions from the four (4) ground shale storage bins are included in the limited emissions for the clay and shale operations.

**Appendix A: Potential Emission Calculations
Storage Silos and Petcoke Processing**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

Storage Silos

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Potential to Emit Before Controls (lbs/hr)	Potential to Emit Before Controls (tons/yr)	Control Efficiency (%)	Potential to Emit After Controls (lbs/hr)	Potential to Emit After Controls (tons/yr)
EU9 - Corn Grit and Sand							
PM	1.6	0.720	1.15	5.05	95.0%	0.058	0.252
PM-10/2.5	1.6	0.460	0.74	3.22	95.0%	0.037	0.161
EU10 - Corn Grit and Sand							
PM	1.6	0.720	1.15	5.05	95.0%	0.058	0.252
PM-10/2.5	1.6	0.460	0.74	3.22	95.0%	0.037	0.161
EU7 - Lime Silo							
PM	0.475	2.200	1.05	4.58	95.0%	0.052	0.229
PM-10/2.5	0.475	2.200	1.05	4.58	95.0%	0.052	0.229
EU5 - Petcoke Silo							
PM	0.97	0.720	0.698	3.06	95.0%	0.035	0.153
PM-10/2.5	0.97	0.460	0.446	1.95	95.0%	0.022	0.098
EU11 - Petcoke Dosing Silo							
PM	0.97	0.720	0.698	3.06	95.0%	0.035	0.153
PM-10/2.5	0.97	0.460	0.446	1.95	95.0%	0.022	0.098
EU8 - Waste Reactant Storage Silo							
PM	0.65	0.720	0.47	2.05	95.0%	0.023	0.102
PM-10/2.5	0.65	0.460	0.30	1.31	95.0%	0.015	0.065
Totals:		PM	5.2	22.8		0.261	1.14
		PM10/2.5	3.7	16.2		0.185	0.812

Methodology

PM and PM10 emission factors for the corn grit and sand silos, petcoke silos and waste reactant silo are from AP-42 Table 11.12-6, SCC 3-05-011-07 for cement unloading to elevated storage silo. PM 2.5 emission factor is assumed to equal PM 10 emission factor.

The emission factors are higher than the emission factors for coal, which are the other alternative for the petcoke. PM 2.5 emission factor is assumed to equal PM10 emission factor.

PM and PM10 emission factors for the lime silo are from AP-42 Table 11.17-4, for lime transfer and conveying. This emission factor is high because it includes conveying, which is enclosed at this source, but was used because it is the best available for lime storage. PM 2.5 emission factor is assumed to equal PM 10 emission factor.

Petcoke Processing

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Potential to Emit Before Controls (lbs/hr)	Potential to Emit Before Controls (tons/yr)	Control Efficiency	Potential to Emit After Controls (lbs/yr)	Potential to Emit After Controls (tons/yr)
Crushing							
PM	0.9735	3.600	3.505	15.4	95.0%	0.175	0.768
PM-10/2.5	0.9735	0.5400	0.526	2.30	95.0%	0.026	0.115

Methodology

Emission factors for Petcoke Grinding are sand grinding/handling emission factors from EPA WebFIRE SCC 3-04-003-50 and are higher than the emission factors for Coal Processing from AIRS SCC #3-050-010-08 & 10. PM 2.5 emission factor is assumed to equal PM 10 emission factor.

Appendix A: Potential Emission Calculations
Color & barium tanks in color mixing room

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

Two 400-gallon mixing-ASTs with port and inside basket distribution system (EU12) and integral wetscrubber (CE12)
 One 800-gallon mixing AST with port and inside basket distribution system (EU12) & CE12
 Two 4,000-gallon mixing-ASTs with port and inside basket distribution system (EU12) & CE12
 Insignificant Emissions from integral wet scrubber for dry material transfer into ASTs
 CE for transfer hoppers is 99% control efficiency. Control Efficiency 95% used in calcs
 ASTs are filled either once a day or twice per day, or once per week, depending on client specifications

50-lb bags of colorant (totally 1,000 lbs) is added to the 400-gallon & 800 gallon AST usually once per day (if operating 24/7, may be 3X over 24 hour period)

COLORANT		
Maximum capacity usage per batch	1000.0 lbs	50 lb bags COLORANT
Maximum hours used per year	2920.0 hr	
AST capacity (water + 1000-lbs of colorant)	1000 lbs of colorant & gallons water	
Maximum filling rate capacity	71.4 lbs/hr	
*AP-42 PM Emission factor from cement unloading (SCC 3-05-011-7)	0.72 lbs PM/ton of parting agent filled	
*AP-42 PM10 Emission Factor from cement unloading (SCC 3-05-011-07)	0.46 lbs PM10/ton of parting agent filled	
Control efficiency on vent	0.97.5 (control efficiency is actually 99%)	

Insignificant Emissions from integral wet scrubber for transfer hoppers on top of ASTs.
 CE for transfer hoppers is 99% control efficiency. Control Efficiency 95% used in calcs
 One to 2 supersacks are added to the 4000-gallon ASTs usually once per day (if operating 24/7, be 3X over 24 hour period)

BARIUM		
Maximum capacity usage per batch	4000.0 lbs	1 to 2 ton supersacks BARIUM SALT
Maximum hours used per year is estimated at 2920 hrs. Impossible to be 8760/hr	2920.0 hours	for most brick use 1 ton Ba
AST capacity (water + 2,000 to 4,000 lbs of barium)	2000 lbs to 4000	lbs of Barium (max) in 500 gals of water
maximum filing rate capacity	71.4 lbs/hr	
*AP-42 PM Emission factor from cement unloading (SCC 3-05-011-7)	0.72 lbs PM/ton of parting agent filled	
*AP-42 PM10 Emission Factor from cement unloading (SCC 3-05-011-07)	0.46 lbs PM/ton of parting agent filled	
Control Efficiency on Vent	0.95 (control efficiency is actually 99%)	

EMISSION ESTIMATES - COLORANT for ASTs 1,2,&3 emissions per AST		
PTE (before control - not applicable with integral baghouse)		
	lbs/hour	tons/year
PM	0.04	0.03
PM 10/2.5	0.02	0.02
AFTER 97.5% CONTROL*		
PM	0.0019	0.0013
PM 10/2.5	0.0012	0.0008

EMISSION ESTIMATES - BARIUM MICROPELLETS for ASTs 3 & 4 emissions per AST		
PTE (before control - not applicable with integral baghouse)		
	lbs/hour	tons/year
PM	0.04	0.03
PM 10/2.5	0.02	0.02
AFTER 97.5% CONTROL*		
PM	0.002	0.0013
PM 10/2.5	0.001	0.0008

Methodology

*Emission Factor for cement unloading (SCC 3-05-011-06) found in AP-42, Table 11.12-2, Emission Factors for Concrete Batching - cement unloading to elevated storage silo, pneumatic; updated 6/06; PM 2.5 emission factor is at

TOTAL AIR EMISSIONS FOR 6 ASTs
0.006426 PM total for 5 ASTs
0.004 PM10 total for 5 ASTs

PTE Before Controls - does not apply because wet scrubber is integral

tons/yr = Colorant or Barium usage rate (lbs/hr) x Emission Factor in lbs/ton of parting agent / 2000 lbs/ton
 lbs/hour = X tons/year x 2000 lbs/ton / 2920 hours/year

PTE PM After Controls

tons/yr = Parting Agent usage rate (lbs/hr) x Emission factor in lbs/ton / 2000 lbs/ton x (1-control efficiency)

Lbs/Day= X tons/year/ 365 days/year X 2000 lbs/ton x (1-control efficiency)

Lbs/Hour= X tons/year X 2000 lbs/ton / 2920 hours/year x (1-control efficiency)

NOTE:

*The CE for all transfer hoppers for all ASTs is rated at 99% but 97.5% is used for facility calculations.

**Assume that these dry chemicals are used 2920 hours/year since they are batch operations that would happen once per shift for 3 shifts a day if operating 24/7.

**Appendix A: Emission Calculations
Parting Agent Hopper EU13**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

Parting Agent Hopper & Pneumatic Line (EU14) (CE13)

Unit	Capacity (lbs/hr)	EF (lbs pm/ton of parting agent)	EF (lbs PM10/2.5/ton of parting agent)	Overspillage	control efficiency	PM (tons/yr)	PM10/2.5 (tons/yr)	Controlled PM tons/yr
CE 13, EU14 - Corn Grit	110	0.87	0.87	30%	97.50%	0.1467	0.1467	0.0037
CE 13, EU14 - Sand	2400	0.0011	0.00051	30%	97.50%	0.0040	0.0019	0.0001
Total						0.1508	0.1486	0.0038

Parting Agent Super Sacks-Transfer & Storage Hoppers (EU13) (CE12)

Unit	Parting Agent	Capacity (lbs/hr)	Emission Factor PM	Emission Factor PM10	PM (tons/yr)	PM10/2.5 (tons/yr)
CE12, EU13	Corn Grit	110	0.017	0.0025	0.0041	0.0006
CE12, EU13	Sand	2400	0.0011	0.00051	0.0058	0.0027
Total					0.0099	0.0033

CE12 = Integral Wet Scrubber; CE13 = Integral Baghouse

METHODOLOGY

PARTING AGENT: CORN GRIT

*Emission Factor for corn handling from AP-42 9.9-1-2; PM 2.5 emission factor is assumed to equal PM 10 emission factor

*Emission factor for grain receiving from AP-42, Table 9.9-1-2; PM 2.5 emission factor is assumed to equal PM 10 emission factor

PARTING AGENT: SAND (or sand like material)

*Emission Factor for sand transfer (SCC 3-05-011-04, 21, 23) found in AP-42, Table 11.12-1, Emission Factors for Concrete Batching - cement unloading to elevated storage silo, pneumatic; updated 6/06; PM 2.5 emission factor is assumed to equal PM 10 emission factor.

PTE Before Controls (NA because integral wet scrubber and integral baghouse)

tons/yr = [Parting Agent usage rate (lbs/hr) x Emission Factor in lbs/ton of parting agent * 0.7 (overspillage) * 8760 hrs/year/2000 lbs/ton]2000 lbs/ton

PTE PM After Controls

tons/yr = PTE before controls * (1-.975 control efficiency)

**Appendix A: Potential Emission Calculations
Pile 3**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

PILE-3: Indoor building B2 storage pile with concrete flooring and large concrete bricks around perimeter
 The raw material is placed in the indoor pile from C4 conveyor, which is located inside building B2.
 If it is in PILE-3, the raw material is awaiting secondary grinding and screening

A front-end loader is used to put the raw materials back onto the conveyor system to send go B2 for secondary crushing and screening.

EMISSIONS UNIT #	EQUIPMENT	EMISSION FACTOR LBS/TON	MAXIMUM THROUGHPUT TONS/YEAR	POLLUTANT	POTENTIAL EMISSIONS lbs/yr	POTENTIAL EMISSIONS tons/yr
PILE-3 located inside Building B2	front end loader moving material from pile to conveyor system to go thru secondary crushing and screening)	0.0069	70000	PM	483.00	0.24
	-	0.0033	70000	PM10	231.00	0.12
		0.0033	70000	PM2.5	231.00	0.12
PILE-3 located inside Building B2	staging indoor piles inside B2 from Conveyor system (C4)	2.84E-07	70000	PM	0.02	0.000010
		1.34E-07	70000	PM10	0.01	0.000005
		2.03E-08	70000	PM2.5	0.00	0.000001
TOTALS				PM		0.24
				PM10		0.12
				PM2.5		0.12

AP42CH11 PM Emissions from piles; PM 2.5 emission factor is assumed to equal PM 10 emission factor

METHODOLOGY

PTE lbs/yr = emission factor in lbs/ton X Maximum throughput in tons/year

PTE tons/yr = PTE lbs/yr X 1 ton/2000 lbs

AP42 Emission Factors in Table 11.12-2, Emission Factors for Concrete Batching

NOTE: All Operations occur outside except loading to AF1

Quarry Raw Material staging piles at the plant outside Bldg. B1. One pile is loaded onto the AF1 apron feeder inside Building B1, before the next pile is delivered from the quarry.

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

40 tons/truck from Quarry and 480 tons a day or 175200 tons/year Minimum Particle Size = 1/4 inch

EMISSIONS UNIT #	EQUIPMENT	EMISSION FACTOR LBS/TON	MAXIMUM THROUGHPUT TONS/YEAR	POLLUTANT	POTENTIAL EMISSIONS lbs/yr	POTENTIAL EMISSIONS tons/yr	
PILE-1 - Near EU1A	Truck Unloading to Outdoor Floor Storage Pile	0.0069	175200	PM	1208.88	0.60	
		0.0033	175200	PM10	578.16	0.29	
		0.0033	175200	PM2.5	578.16	0.29	
PILE 1 - Near EU1A	front end loader moving material from pile to AF1 apron feeder inside Bldg B1	0.0069	175200	PM	1208.88	0.60	
		-	0.0033	175200	PM10	578.16	0.29
		0.0033	175200	PM2.5	578.16	0.29	
LE-1 - Near EU	staging piles outside B1 on concrete floor with large concrete block wall 'C' shaped.	2.84E-07	175200	PM	0.05	0.000025	
		1.34E-07	175200	PM10	0.02	0.000012	
		2.03E-08	174200	PM2.5	0.00	0.000002	
TOTALS				PM		1.20	
				PM10		0.58	
				PM2.5		0.58	

WASTE PILE - Maximum Storage of 6,000 tons/yr; average storage of 3,000 tons/yr. Minimum Diameter Size = 4 inches

EMISSIONS UNIT #	EQUIPMENT	EMISSION FACTOR LBS/TON	MAXIMUM THROUGHPUT TONS/YEAR	POLLUTANT	POTENTIAL EMISSIONS lbs/yr	POTENTIAL EMISSIONS tons/yr	
PILE-2 - Near Buildings 3 & 4	Truck Unloading to Outdoor Floor (asphalt) Storage Pile	0.0069	6000	PM	41.40	0.02	
		0.0033	6000	PM10	19.80	0.01	
		0.0033	6000	PM2.5	19.80	0.01	
PILE-2 - Near Buildings 3 & 4	front end loader moving material from pile to haul truck or back into production	0.0069	6000	PM	41.40	0.02	
		-	0.0033	6000	PM10	19.80	0.01
		0.0033	6000	PM2.5	19.80	0.01	
PILE-2 - Near Buildings 3 & 4	staging piles outside B1 on concrete floor with large concrete block wall 'C' shaped.	2.84E-07	6000	PM	0.00	0.000001	
		1.34E-07	6000	PM10	0.00	0.000000	
		2.03E-08	6000	PM2.5	0.00	0.000000	
TOTAL EMISSIONS				PM		0.04	
				PM10		0.02	
				PM2.5		0.02	

OURDOOR WASTE STORAGE PILE INFORMATION

The size of the green brick (undried and unfired with 14% moisture) is at least 1/2 of a residential sized brick and larger. These green bricks that makeup the waste pile are comprised of cohesive materials mixed with the shale/clay during brick manufacturing that keep the materials bound together in addition to the 14% moisture

The chunks of bricks are the material that comes from the permitted outside 3-sided bunker (with a conveyor that runs over the top of it) that is located between Building B3 & B4. The 3-sided bunker is included in the current permit in Permit Condition A.3 and no emissions come from this bunker nor are there any emissions included in the current permit.

The waste pile is recycled back into the green brick production inside Bldg. B4

Currently, this waste pile is considered a temporary waste pile, as the plant is developing methods to turn around the recycling of the waste pile after it's created.

The average waste pile is 3,000 tons/year and the maximum is 6,000 tons/yr and is stored on asphalt behind and between Bldgs 2 & 4.

METHODOLOGY

PTE lbs/yr = emission factor in lbs/ton X Maximum throughput in tons/year

PTE tons/yr = PTE lbs/yr X 1 ton/2000 lbs

AP42 Emission Factors in Table 11.12-2, Emission Factors for Concrete Batching; PM 2.5 emission factor is assumed to equal PM 10 emission factor

NOTE: All Operations occur outside except loading to AF1

Quarry Raw Material staging piles at the plant outside Bldg. B1. One pile is loaded onto the AF1 apron feeder inside Building B1, before the next pile is delivered from the quarry.

**Appendix A: Unlimited Emissions Calculations
Wind Erosion from PILE-1 and PILE-2**

Company Name: Brampton Brick, Inc.
Address City IN Zip: 1256 E CR 950 N, Farmersburg, IN 47850
Significant Permit Modification No.: 153-32149-00033
Reviewer: Kristen Willoughby
Date: August 30, 2012

SHALE/CLAY PILE-1 AND BROKEN WASTE GREEN BRICK PILE-2

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$ <p>where E_f = emission factor (lb/acre/day)</p> <p>s = silt content (wt %) 10</p> <p>p = 125 days of rain greater than or equal to 0.01 inches</p> <p>f = 15 % of wind greater than or equal to 12 mph</p>

$E_f = 11.57$

	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
PILE-2	10	11.57	0.25	0.528	0.185
PILE 1	10	11.57	0.13	0.264	0.092
Totals				0.79	0.28

Methodology

PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)

PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%

*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95); PM 2.5 emission factor is assumed to equal PM 10 emission factor

**Maximum anticipated pile size (acres) provided by the source.

PM2.5 = PM10

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

PM2.5 = Particulate Matter (<2.5 um)

PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Michael Rixner
Brampton Brick
1256 CR 950 N
Farmersburg, IN 47850

DATE: November 27, 2012

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

SUBJECT: Final Decision
Part 70
153-32149-00033

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

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

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

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

Final Applicant Cover letter.dot 11/30/07



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Toll Free (800) 451-6027
www.idem.IN.gov

TO: Sullivan County Public Library

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

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

Applicant Name: Brampton Brick
Permit Number: 153-32149-00033

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 11/27/2012 Brampton Brick 153-32149-00033 (Final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Type of Mail: CERTIFICATE OF MAILING ONLY	
	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Michael Rixner Brampton Brick 1256 CR 950 N Farmersburg IN 47850 (Source CAATS) (CONFIRM DELIVERY)										
2		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)										
3		Sullivan County Health Department 31 N Court Street Sullivan IN 47882-1509 (Health Department)										
4		Sullivan County Commissioners 100 Courthouse Square Sullivan IN 47882-1593 (Local Official)										
5		Sullivan Co Public Library 100 S Crowder Sullivan IN 47882-1750 (Library)										
6		Mr. Richard Monday 545 E. Margaret Dr. Terre Haute IN 47801 (Affected Party)										
7		Farmersburg Town Council 307 W. Hopewell Street Farmersburg IN 47850 (Local Official)										
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