



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: August 6, 2008

RE: Can Clay Corporation / 123-26112-00001

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY and IDEM Southwest Regional Office

**Can Clay Corporation
402 Washington Street
Cannelton, Indiana 47520**

(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.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 MSOP under 326 IAC 2-6.1.

Operation Permit No.: M123-26112-00001	
Original signed by:	Issuance Date: August 6, 2008
Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date: August 6, 2018

TABLE OF CONTENTS

A. SOURCE SUMMARY.....	4
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
B. GENERAL CONDITIONS	5
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	10
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-6.1-5(a)(2)]	
C.8 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.12 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.13 Response to Excursions or Exceedances	
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test	

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]
[IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 16

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.1.1 Particulate [326 IAC 6-3-2]
- D.1.2 Preventative Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.3 Particulate Control

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

- D.1.4 Visible Emission Notations
- D.1.5 Parametric Monitoring
- D.1.6 Baghouse Inspections
- D.1.7 Broken or Failed Bag Detection
- D.1.8 Cyclone Inspections
- D.1.9 Cyclone Failure Detection

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

- D.1.10 Record Keeping Requirements

Annual Notification 20
Malfunction Report 21

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 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary structural clay pipe and flue manufacturing source.

Source Address:	402 Washington Street, Cannelton, Indiana 47520
Mailing Address:	402 Washington Street, Cannelton, IN 47520
General Source Phone Number:	(812) 547-3461
SIC Code:	3298
County Location:	Perry
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Two (2) raw material grinding processes, constructed prior to August 7, 1977, each controlled by one (1) integral baghouse, identified as baghouse A and baghouse B, capacity: 10.0 tons of clay per hour, each, exhausting to stacks BH-A and BH-B, respectively.
- (b) One (1) tunnel kiln, firing sawdust from clean, untreated wood, identified as TK1, constructed prior to August 7, 1977, capacity: 0.83 tons of clay per hour and 13.3 million British thermal units per hour, exhausting to stack S10.
- (c) Six (6) periodic kilns, firing sawdust from clean, untreated wood, identified as PK1 through PK6, constructed prior to August 7, 1977, capacity: 1.25 tons of clay per hour, each, and 20.0 million British thermal units per hour, each, exhausting to stacks S1 through S6, respectively.
- (d) Eight (8) wood-fired clayware dryers, firing only clean, untreated wood, identified as D1 through D8, constructed prior to August 7, 1977, capacity: 0.05 tons of clay per hour, each, and 0.80 million British thermal units per hour, each.
- (e) Four (4) wood-fired space heaters, firing only clean, untreated wood, identified as H1 through H4, constructed prior to August 7, 1977, capacity: 0.40 million British thermal units per hour, each, exhausting to stacks S6 through S9, respectively.
- (f) One (1) wood grinding operation, permitted in 2003, controlled by a cyclone identified as Cycl-1, exhausting to stack S21, capacity: 4.0 tons of wood per hour.
- (g) One (1) jointing operation, permitted in 2003, consisting of the application of polyurethane resin, capacity: 25,000 tons of clay per year.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M123-26112-00001, is issued for a fixed term of ten (10) 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, 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

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

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

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

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (c) The notification 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.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M123-26112-00001 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, 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 ninety (90) days 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 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

(a) Enter upon the Permittee's premises where a permitted 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [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.
- (b) 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.19 Credible Evidence [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 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.6 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 is not federally enforceable.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11]

- (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

C.13 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;

- (2) monitor performance data, if applicable; and
- (3) corrective actions taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

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

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The

records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

- (b) 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.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Two (2) raw material grinding processes, constructed prior to August 7, 1977, each controlled by one (1) integral baghouse, identified as baghouse A and baghouse B, capacity: 10.0 tons of clay per hour, each, exhausting to stacks BH-A and BH-B, respectively.
- (b) One (1) tunnel kiln, firing sawdust from clean, untreated wood, identified as TK1, constructed prior to August 7, 1977, capacity: 0.83 tons of clay per hour and 13.3 million British thermal units per hour, exhausting to stack S10.
- (c) Six (6) periodic kilns, firing sawdust from clean, untreated wood, identified as PK1 through PK5, constructed prior to August 7, 1977, capacity: 1.25 tons of clay per hour, each, and 20.0 million British thermal units per hour, each, exhausting to stacks S1 through S5, respectively.
- (d) Eight (8) wood-fired clayware dryers, firing only clean, untreated wood, identified as D1 through D8, constructed prior to August 7, 1977, capacity: 0.05 tons of clay per hour, each, and 0.80 million British thermal units per hour, each.
- (e) Four (4) wood-fired space heaters, firing only clean, untreated wood, identified as H1 through H4, constructed prior to August 7, 1977, capacity: 0.40 million British thermal units per hour, each, exhausting to stacks S6 through S9, respectively.
- (f) One (1) wood grinding operation, permitted in 2003, controlled by a cyclone identified as Cycl-1, exhausting to stack S21, capacity: 4.0 tons of wood per hour.
- (g) One (1) jointing operation, permitted in 2003, consisting of the application of polyurethane resin, capacity: 25,000 tons of clay 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 2-6.1-5(a)(1)]

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

Pursuant to 326 IAC 6-3-2(e):

- (a) The particulate emission rate from each raw material grinding process shall not exceed 19.2 pounds per hour when operating at a process weight rate of 10.0 tons per hour.
- (b) The particulate emission rate from the one (1) tunnel kiln shall not exceed 3.62 pounds per hour when operating at a process weight rate of 0.83 tons per hour.
- (c) The particulate emission rate from each of the six (6) periodic kilns shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour.
- (d) The particulate emission rate from each of the eight (8) clayware dryers shall not exceed five hundred fifty-one thousandths (0.551) pound per hour.
- (e) The particulate emission rate from the wood grinding operation shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4.0 tons per hour.

These limitations are based on 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.1.2 Preventative Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.3 Particulate Control

In order to comply with Condition D.1.1, the baghouses for particulate control shall be in operation and control emissions from the raw material grinding processes at all times that the raw material grinding processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the raw material grinding processes and the wood grinding operation stack exhaust, identified as BH-A, BH-B and S21, 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 including startup or shutdown time.
- (c) In the case of batch or discontinuous operations, reading shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the raw material grinding processes, at least once per day when the raw material grinding processes (e.g. the two (2) raw material grinding processes controlled by baghouses A and B) are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

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

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all baghouses controlling the raw material grinding processes.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (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 C - Response to Excursions and Exceedances).
- (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 C - Response to Excursions and Exceedances).

D.1.8 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the wood grinding operation.

D.1.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of once per day visible emission notations of the raw material grinding processes and the wood grinding operation stack exhausts.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain once per day records of the total static pressure drop during normal operation.

- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Can Clay Corporation
Address:	402 Washington Street
City:	Cannelton, Indiana 47520
Phone #:	(812) 547-3461
MSOP #:	M123-26112-00001

I hereby certify that Can Clay Corporation is :

still in operation.

no longer in operation.

I hereby certify that Can Clay Corporation is :

in compliance with the requirements of MSOP M123-26112-00001.

not in compliance with the requirements of MSOP M123-26112-00001.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality
and IDEM Southwest Regional Office**

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Can Clay Corporation
Source Location:	402 Washington St, Cannelton, IN 47520
County:	Perry
SIC Code:	3298
Permit Renewal No.:	M123-26112-00001
Permit Reviewer:	Summer Keown

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Can Clay Corporation relating to the operation of a stationary structural clay pipe and flue manufacturing source.

History

On February 19, 2008, Can Clay Corporation submitted an application to the OAQ requesting to renew its operating permit. Can Clay Corporation was issued a MSOP Renewal, No. M123-9340-00001, on May 15, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) Two (2) raw material grinding processes, constructed prior to August 7, 1977, each controlled by one (1) integral baghouse, identified as baghouse A and baghouse B, capacity: 10.0 tons of clay per hour, each, exhausting to stacks BH-A and BH-B, respectively.
- (b) One (1) tunnel kiln, firing sawdust from clean, untreated wood, identified as TK1, constructed prior to August 7, 1977, capacity: 0.83 tons of clay per hour and 13.3 million British thermal units per hour, exhausting to stack S10.
- (c) Six (6) periodic kilns, firing sawdust from clean, untreated wood, identified as PK1 through PK6, constructed prior to August 7, 1977, capacity: 1.25 tons of clay per hour, each, and 20.0 million British thermal units per hour, each, exhausting to stacks S1 through S6, respectively.
- (d) Eight (8) wood-fired clayware dryers, firing only clean, untreated wood, identified as D1 through D8, constructed prior to August 7, 1977, capacity: 0.05 tons of clay per hour, each, and 0.80 million British thermal units per hour, each.
- (e) Four (4) wood-fired space heaters, firing only clean, untreated wood, identified as H1 through H4, constructed prior to August 7, 1977, capacity: 0.40 million British thermal units per hour, each, exhausting to stacks S6 through S9, respectively.
- (f) One (1) wood grinding operation, permitted in 2003, controlled by a cyclone identified as Cycl-1, exhausting to stack S21, capacity: 4.0 tons of wood per hour.
- (g) One (1) jointing operation, permitted in 2003, consisting of the application of polyurethane resin, capacity: 25,000 tons of clay per year.

Existing Approvals

Since the issuance of the MSOP (M123-9340-00001) on May 15, 2003, the source has constructed or has been operating under the following approval as well:

Notice-Only Change No. 123-23416-00001 issued on November 13, 2006.

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

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the baghouses be considered as an integral part of the raw material grinding process:

- (a) The baghouses were originally installed in the 1960's and 1970's to ensure that fine clay particulate were included in the process clay prior to entering the extrusion process. Without adequate fines in extrudeable clay, the process fails to make good products. The fine clay particles provide for smoother running mix, which provides for smoother exteriors to the final product and a tighter, stronger clay body.
- (b) The raw material grinding process is not operated without proper operation of the baghouses. Proper baghouse operation is monitored and if it falls out of operating parameters, the raw material grinding process exhaust systems are terminated until the baghouse is returned to service. Per Can Clay Corporation work instruction form WI019, "If the vacuum reading is not within proper operating range, immediately shutdown the grinding operation, notify the Production Superintendent and initiate repairs."

Pursuant to MSOP No. M123-9340-00001, issued on May 15, 2003, IDEM, OAQ has evaluated the justifications and agreed that the baghouses will be considered as an integral part of the raw material grinding process. Therefore, the permitting level will be determined using the potential to emit after the baghouses. Operating conditions in the proposed permit will specify that these baghouses shall operate at all times when the raw material process is in operation.

Enforcement

There are no enforcement actions pending.

Emission Calculations

See Appendix A, pages 1 through 6, of this document for detailed emission calculations.

County Attainment Status

The source is located in Perry County

Pollutant	Designation
SO ₂	Unclassifiable or attainment.
CO	Unclassifiable or attainment.
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.	

- (a) Ozone Standards
 - (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
 - (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
 - (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
 - (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Perry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) PM2.5
Perry County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Other Criteria Pollutants
Perry County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit (tons/year)							
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HF	Total HAPs
raw material grinding A	14.89	11.17	0.0	0.0	0.0	0.0	0.0	0.0
raw material grinding B	11.17	6.99	0.0	0.0	0.0	0.0	0.0	0.0
tunnel kiln	3.38	3.09	2.44	0.65	5.82	1.35	0.96	1.0
periodic kilns	2.14	1.12	0.0	0.33	4.93	16.43	8.67	9.03
dryers and space heaters	11.56	10.76	0.88	0.46	21.02	7.71	0.0	1.2
wood grinding	0.74	0.74	0.0	0.0	0.0	0.0	0.0	0.0
jointing	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Total Emissions	43.9	32.0	3.3	2.4	31.8	25.5	9.6	11.2

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The potential to emit of all criteria pollutants is less than two hundred and fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable to this source.

326 IAC 2-3 (Emission Offset)

The unrestricted potential emissions of VOC and NO_x are less than one hundred (100) tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable to this source.

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

This source is not subject to the requirements of 326 IAC 2-4.1 because the potential to emit (PTE) of:

- (a) A single hazardous pollutant (HAP) is less than 10 tons per year, and
- (b) Any combination of HAPs is less than 25 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is located in Perry County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

State Rule Applicability – Individual Facilities

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

- (a) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from each raw material grinding process shall not exceed 19.2 pounds per hour when operating at a process weight rate of 10.0 tons per hour.

This limitation is based on 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:

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

The associated baghouses, identified as Baghouse A and Baghouse B, shall be in operation at all times each raw material grinding process is in operation, in order to comply with this limit.

- (b) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the one (1) tunnel kiln shall not exceed 3.62 pounds per hour when operating at a process weight rate of 0.83 tons per hour.

This limitation is based on 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:

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

The particulate emissions from the one (1) tunnel kiln are 0.772 pounds per hour which is less than the allowable particulate emission rate of 3.62 pounds per hour. Therefore, the one (1) tunnel kiln shall be in compliance with this rule.

- (c) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from each of the six (6) periodic kilns shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour.

This limitation is based on 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:

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

The particulate emissions from each of the six (6) periodic kilns are 0.081 pounds per hour, which is less than the allowable particulate emission rate of 4.76 pounds per hour. Therefore, the six (6) periodic kilns shall be in compliance with this rule.

- (d) Pursuant to 326 IAC 6-3-2(e)(2), the process rate for each of the eight (8) clayware dryers is less than one hundred (one hundred) pounds per hour. Therefore, the allowable rate of emission is five hundred fifty-one thousandths (0.551) pound per hour.

The particulate emissions from each of the eight (8) clayware dryers are less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b), the eight (8) clayware dryers shall be in compliance with this rule.

- (e) Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the wood grinding operation shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4.0 tons per hour.

This limitation is based on 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:

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

The particulate emissions from the wood grinding operation are 3.38 pounds per hour which is less than the allowable particulate emission rate of 10.4 pounds per hour. Therefore, the wood grinding operation shall be in compliance with this rule.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This source does not have potential VOC emissions equal to or greater than twenty-five (25) tons per year, therefore 326 IAC 8-1-6 is not applicable. Any change or modification which may increase the potential emissions to 25 tons per year or more of volatile organic compounds must be approved by the Office of Air Quality before any such change may occur.

Compliance Determination and Monitoring Requirements

1. The raw material grinding has applicable compliance monitoring conditions as specified below:

- (a) Visible Emissions Notations
- (1) Visible emission notations of the raw material grinding processes and the wood grinding operation stack exhausts, identified as BH-A, BH-B, and S21, shall be

performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (2) For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not including startup or shutdown time.
- (3) In the case of batch or discontinuous operations, reading shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (4) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses, identified as baghouse A and baghouse B, used in conjunction with the raw material grinding processes, at least once per day when the raw material grinding process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 6.0 inches of water, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

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

- (c) An inspection shall be performed each calendar quarter of all baghouses controlling the raw material grinding processes.
- (d) 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).

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.

2. The wood grinding operation has applicable compliance monitoring conditions as specified below:

- (a) An inspection shall be performed each calendar quarter of the cyclone, identified as S21, controlling the wood grinding operation.
- (b) For a cyclone 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).
- (c) For a cyclone 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).

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal, No. M123-26112-00001, be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on February 19, 2008.

Conclusion

The operation of this stationary structural clay pipe and flue manufacturing source shall be subject to the conditions of the attached MSOP Renewal No. M123-26112-00001.

Appendix A: Emission Calculations

Company Name: Can Clay Corporation
Source Location: 402 Washington St, Cannelton, IN 47520
Permit Number: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity								
Pollutant	Raw Material Grinding A*	Raw Material Grinding B*	Tunnel Kiln	Periodic Kilns	Clayware Dryers and Space Heaters H1 - H4	Wood Grinding	Jointing	TOTAL
PM	14.89	11.17	3.38	2.14	11.56	14.80	0.00	57.9
PM10	9.32	6.99	3.09	1.12	10.76	14.80	0.00	46.1
SO2	0.00	0.00	2.44	0.00	0.88	0.00	0.00	3.3
NOx	0.00	0.00	1.35	16.43	7.71	0.00	0.00	25.5
VOC	0.00	0.00	0.65	0.33	0.46	0.00	1.00	2.4
CO	0.00	0.00	5.82	4.93	21.02	0.00	0.00	31.8
HF	0.00	0.00	0.96	8.67	0.00	0.00	0.00	9.6
HCl	0.00	0.00	0.04	0.36	0.00	0.00	0.00	0.4
Total HAPs	0.00	0.00	1.00	9.03	1.20	0.00	0.00	11.2

Controlled Potential Emissions (tons/year)

Pollutant	Raw Material Grinding A*	Raw Material Grinding B*	Tunnel Kiln	Periodic Kilns	Clayware Dryers and Space Heaters H1 - H4	Wood Grinding	Jointing	TOTAL
PM	14.89	11.17	3.38	2.14	11.56	0.74	0.00	43.9
PM10	9.32	6.99	3.09	1.12	10.76	0.74	0.00	32.0
SO2	0.00	0.00	2.44	0.00	0.88	0.00	0.00	3.3
NOx	0.00	0.00	1.35	16.43	7.71	0.00	0.00	25.5
VOC	0.00	0.00	0.65	0.33	0.46	0.00	1.00	2.4
CO	0.00	0.00	5.82	4.93	21.02	0.00	0.00	31.8
HF	0.00	0.00	0.96	8.67	0.00	0.00	0.00	9.6
HCl	0.00	0.00	0.04	0.36	0.00	0.00	0.00	0.4
Total HAPs	0.00	0.00	1.00	9.03	1.20	0.00	0.00	11.2

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

*Integral to the process

**Appendix A: Emission Calculations
Raw Material Grinding Processes A and B**

Company Name: Can Clay Corporation
Address City IN Zip: 402 Washington St, Cannelton, IN 47520
Permit Number: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Emission Unit - Raw Material Griding A

Pollutant	Maximum Clay Throughput (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate* (lbs/hr)	Controlled Emission Rate* (tons/yr)
PM	10.000	8.500	85.000	372.300	96.00%	3.400	14.892
PM-10	10.000	5.32	53.200	233.016	96.00%	2.128	9.321

Emission Unit - Raw Material Griding B

Pollutant	Maximum Clay Throughput (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate* (lbs/hr)	Controlled Emission Rate* (tons/yr)
PM	10.000	8.500	85.000	372.300	97.00%	2.550	11.169
PM-10	10.000	5.32	53.200	233.016	97.00%	1.596	6.990

Methodology

Uncontrolled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton)

Uncontrolled Emission Rate (tons/yr) = Throughput (tons/hr) x EF (lbs/ton) x 8760 (hrs/yr) / 2000 (lbs/ton)

Controlled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff)

Controlled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff) x 8760 (hrs/yr) / 2000 (lbs/ton)

Emission factors taken from AP-42 11.3-1 (8/97)

IDEM has determined that the control equipment for the raw material grinding processes A and B are integral to the process.

Therefore, only the emissions rates after controls are considered for the purposes of this permit.

**Appendix A: Emission Calculations
Kilns firing sawdust**

Company Name: Can Clay Corporation
Address City IN Zip: 402 Washington St, Cannelton, IN 47520
Permit Number: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Emission Unit - Tunnel Kiln

Pollutant	Maximum Clay Throughput (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)
PM	0.830	0.930	0.772	3.381
PM-10	0.830	0.85	0.706	3.090
SO₂	0.830	0.67	0.556	2.436
NOx	0.830	0.37	0.307	1.345
VOC	0.830	0.18	0.149	0.654
CO	0.830	1.6	1.328	5.817
HF*	0.830	0.264	0.219	0.960
HCl*	0.830	0.011	0.009	0.040

Emission Unit - Six (6) Periodic Kilns

Pollutant	Maximum Clay Throughput (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)
PM	7.500	0.065	0.488	2.135
PM-10	7.500	0.034	0.255	1.117
SO₂	7.500	0	0.000	0.000
NOx	7.500	0.500	3.750	16.425
VOC	7.500	0.010	0.075	0.329
CO	7.500	0.150	1.125	4.928
HF*	7.500	0.264	1.980	8.672
HCl*	7.500	0.011	0.083	0.361

Methodology

Uncontrolled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton)

Uncontrolled Emission Rate (tons/yr) = Throughput (tons/hr) x EF (lbs/ton) x 8760 (hrs/yr) / 2000 (lbs/ton)

Controlled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff)

Controlled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff) x 8760 (hrs/yr) / 2000 (lbs/ton)

*HF and HCl emissions factors are based on the results of a laboratory sampling of the clay used at Can Clay Corporation.

The analysis was performed by Mission Clay Products, in October 1999.

All other emission factors for the tunnel kiln taken from AP-42 11.3-1 (8/97)

All other emission factors for the periodic kilns from EPA FIRE, SCC # 3-05-003-14

**Appendix A: Emissions Calculations
Wood Waste Combustion (uncontrolled)
Wet Wood**

Company Name: Can Clay Corporation
Address City IN Zip: 402 Washington St, Cannelton, IN 47520
Plt ID: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Emission Unit	Capacity
space heaters	4 x 0.4 MMBtu/hr
clayware dryers	8 x 0.8 MMBtu/hr
Total	8.0 MMBtu/hr

Capacity (MMBtu/hr) 8.0

Moisture content = 30 %

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM10*	SO2	NOx	VOC	CO	Lead
	0.33	0.307	0.025	0.22	0.013	0.6	4.80E-05
Potential Emissions in tons/yr	11.56	10.76	0.88	7.71	0.46	21.02	0.002

Wet wood is considered to be greater than or equal to 20% moisture content. Dry wood is considered to be less than 20% moisture content.

*The PM10 and PM2.5 emission factors include the condensible PM emission factor of 0.017 lb/MMBtu, measured by EPA Method 202 (or equivalent) and the appropriate filterable PM emission factor, measured by EPA Method 5 (or equivalent). The PM emission factor is filterable PM measured by EPA Method 5 (or equivalent).

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs}/1 \text{ ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired bo

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760\text{hrs/yr} \times 1\text{ton}/2000\text{lbs}$$

**Appendix A: HAPs Emissions Calculations
External Combustion Boiler
Wood Waste Combustion (uncontrolled)
All Wood Waste Fuel Types**

Company Name: Can Clay Corporation
Address City IN Zip: 402 Washington St, Cannelton, IN 47520
Plt ID: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Capacity (MMBtu/hr) 8.0

Emission Factor in lb/MMBtu	Selected Hazardous Air Pollutants				
	Acrolein	Benzene	Formaldehyde	Hydrogen Chloride	Styrene
Potential Emissions in tons/yr	4.0E-03	4.2E-03	4.4E-03	1.9E-02	1.9E-03
	1.4E-01	1.5E-01	1.5E-01	6.7E-01	6.7E-02

Total HAPs: 1.2

Methodology

To convert from tons/hr capacity to MMBtu/hr capacity:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Capacity (tons/hr)} \times \text{Higher Heating Value of wood fuel (Btu/lb)} \times (1 \text{ MMBtu}/10^6 \text{ Btu}) \times 2000 \text{ lbs}/1 \text{ ton}$$

Emission Factors are from AP-42 Chapter 1.6 (revised 3/02), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired bo

$$\text{Emissions (tons/yr)} = \text{Capacity (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)} \times 8760\text{hrs/yr} \times 1\text{ton}/2000\text{lbs}$$

These factors include the five HAPs with the highest AP-42 emission factors.

Appendix A: Emission Calculations
Wood Grinding

Company Name: Can Clay Corporation
Address City IN Zip: 402 Washington St, Cannelton, IN 47520
Permit Number: M123-26112-00001
Reviewer: Summer Keown
Date: March 7, 2008

Wood Grinding Operation

Amount collected by cyclone: 77 lbs/day
Efficiency of cyclone: 95%
77 lbs/day / 95% control efficiency = **14.8 tons/yr before controls**

$14.8 * (1-0.95) = \mathbf{0.74 \text{ tons/year after controls}}$

Methodology

$PM/PM_{10} = (77 \text{ lbs/day}) \times (365 \text{ days/year}) \times (1 \text{ ton}/2000 \text{ lbs}) / 95\% = 14.8 \text{ tons /yr}$