



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: October 30, 2006
RE: Unimin Corporation- Huntingburg Facility / 037-12727-00062
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, 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, Room 1049, 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.dot 03/23/06



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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Unimin Corporation - Huntingburg Facility
1405 Industrial Park Dr.
Huntingburg, Indiana 47542**

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

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.: MSOP 037-12727-00062	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 30, 2006 Expiration Date: October 30, 2011

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 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 mineral (fireclay) processing facility.

Authorized Individual:	Vice President
Source Address:	1405 Industrial Park Dr., Huntingburg, Indiana 47542
Mailing Address:	P. O. Box 194, Huntingburg, Indiana 47542
SIC Code:	1455
Phone Number:	(812) 683-2179
Source Location Status:	Dubois
County Status:	Nonattainment for PM _{2.5} Standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit (MSOP) Minor Source, under PSD and Non-Attainment NSR; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One Mixer, identified as MX-205, constructed in 1997, with a maximum throughput of 40,000 pounds per hour, with emissions controlled by baghouse DC-227 (not integral), and exhausting to stack 227.
- (b) One (1) Roller Mill/Whizzer Separator, identified as RL-110/111, constructed in 1981, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack 117.
- (c) One (1) Roller Mill/Whizzer Separator, identified as RL-210/211, constructed in 1982, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack 217.
- (d) One (1) Silo, identified as SI-610, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-612, and exhausting to stack 612.
- (e) One (1) Silo, identified as SI-620, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-622, and exhausting to stack 622.
- (f) One (1) Silo, identified as SI-630, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-632, and exhausting to stack 632.

- (g) One (1) North Storage Bin, identified as BN-710, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (h) One (1) Middle Storage Bin, identified as BN-720, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (i) One (1) North Bin Loadout Spout, identified as LS-712, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (j) One (1) Middle Bin Loadout Spout, identified as LS-722, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (k) One (1) Mill #1 Heater, identified as HE-116, constructed in 1981, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack DC-117.
- (l) One (1) Mill #2 Heater, identified as HE-216, constructed in 1982, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack DC-217.
- (m) One (1) South Storage Bin, identified as BN-730, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (n) One (1) South Bin Loadout Spout, identified as LS-732, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (o) One (1) Railroad Loadout Spout, identified as LS-752, constructed in 1991, with a maximum capacity of 100,000 pounds per hour, with emissions controlled by baghouse DC-754 (not integral), and exhausting to stack 754.
- (p) One (1) Storage Bin, identified as BN-910, constructed in 1999, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (q) One (1) Bulk Bagger/Screw Conveyor, identified as BA-914/SC-911, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (r) One (1) Storage Bin, identified as BN-810, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (s) One (1) 3-Spout Packer unit, identified as BA-811, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (t) One (1) Belt Conveyor, identified as BC-101, constructed in 1998, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.

- (u) One (1) Belt Conveyor, identified as BC-102, constructed in 1991, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (v) One (1) Portable Tile Crusher, identified as CR-410, constructed in 1997, with a maximum capacity of 30,000 pounds per hour, a source of fugitive emissions.
- (w) One (1) Hopper, identified as HO-200, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (x) One (1) Hopper, identified as HO-400, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (y) One (1) Hopper, identified as HO-500, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (z) One (1) Bin, identified as BN-108, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by baghouse DC-130, and exhausting to stack 130.
- (aa) Activities with particulate matter emissions equal to or less than 5 tons per year: Fugitive emission sources constructed before August 1983: Belt conveyors BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, and BC-011, Bin BN-208, Portable Clay Shredder (including Shredder SH-001, Feeder FE-001, and Belt Conveyors BC-001, BC-002), and Hopper HO-100.
- (bb) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Parts washer using mineral spirits which commenced operation in 1981.
- (cc) Combustion source flame safety purging on startup.
- (dd) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (ee) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F): Use of cans of citrus and penetrating oil.
- (ff) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment.
- (gg) Replacement and repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment: Baghouse bags and air filters.
- (hh) Paved and unpaved roads and parking lots with public access.
- (ii) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment: Secondary containment for 500 gallon portable diesel storage tank.
- (jj) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (kk) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983.

- (ll) Purge double block and bleed valves.
- (mm) Filter or coalescer media changeout.
- (nn) A laboratory as defined in 326 IAC 2-7-1(21)(D).

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] [IC13-15-3-6(a)]

- (a) This permit, 037-12727-00062, 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 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. 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:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 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 prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

- (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.
- (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 037-12727-00062 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
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 2-6.1 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
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the “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 2-6.1-6(d)]

B.15 Source Modification Requirement

A modification, construction, or reconstruction is governed by 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] [IC13-17-3-2][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 this title or the conditions of this permit or any operating permit revisions;

(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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(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 Operation [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
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "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

C.1 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.2 Opacity [326 IAC 5-1]

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

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

C.3 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).

C.4 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 plan submitted to IDEM on October 16, 2001 and updated on July 2, 2002. The Fugitive Dust Control Plan is attached to this permit as Appendix A.

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.6 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
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 Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.7 Performance Testing [326 IAC 3-6]

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

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

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

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 the “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 the 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.8 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

C.9 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.10 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.11 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 have a scale such that the expected normal reading 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.12 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;
 - (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.13 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 emissions unit 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 re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to non-compliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.14 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.15 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.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [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
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.
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (a) One Mixer, identified as MX-205, constructed in 1997, with a maximum throughput of 40,000 pounds per hour, with emissions controlled by baghouse DC-227 (not integral), and exhausting to stack 227.
- (b) One (1) Roller Mill/Whizzer Separator, identified as RL-110/111, constructed in 1981, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack 117.
- (c) One (1) Roller Mill/Whizzer Separator, identified as RL-210/211, constructed in 1982, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack 217.
- (d) One (1) Silo, identified as SI-610, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-612, and exhausting to stack 612.
- (e) One (1) Silo, identified as SI-620, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-622, and exhausting to stack 622.
- (f) One (1) Silo, identified as SI-630, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-632, and exhausting to stack 632.
- (g) One (1) North Storage Bin, identified as BN-710, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (h) One (1) Middle Storage Bin, identified as BN-720, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (i) One (1) North Bin Loadout Spout, identified as LS-712, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (j) One (1) Middle Bin Loadout Spout, identified as LS-722, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (k) One (1) Mill #1 Heater, identified as HE-116, constructed in 1981, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack DC-117.
- (l) One (1) Mill #2 Heater, identified as HE-216, constructed in 1982, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack DC-217.
- (w) One (1) Hopper, identified as HO-200, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.

- (x) One (1) Hopper, identified as HO-400, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (y) One (1) Hopper, identified as HO-500, constructed in 1997, loaded by truck dumping, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (z) One (1) Bin, identified as BN-108, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by baghouse DC-130, and exhausting to stack 130.
- (aa) Activities with particulate matter emissions equal to or less than 5 tons per year: Fugitive emission sources constructed before August 1983: Belt conveyors BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, and BC-011, Bin BN-208, Portable Clay Shredder (including Shredder SH-001, Feeder FE-001, and Belt Conveyors BC-001, BC-002), and Hopper HO-100.

(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 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (Particulate Emission Limitations), the allowable particulate emission rate from facilities MX-205, RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, BN-108, LS-712, LS-722, HE-116, and HE-216, shall not exceed 0.03 grains per dry cubic standard foot.

D.1.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5, fugitive particulate matter emissions from HO-200, HO-400, HO-500, BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, BC-011, BN-208, Portable Clay Shredder, and HO-100 shall be controlled according to the plan submitted to IDEM on October 16, 2001 and updated on July 2, 2002. The plan identifies which measures will be taken to mitigate fugitive particulate matter emissions from open aggregate piles, outdoor conveying of aggregate material, transfer of aggregate material, transportation of material, loading and unloading operations, solid waste handling, and material handling operations. The Fugitive Dust Control Plan is attached as Appendix A.

Compliance Determination Requirements

D.1.3 Particulate Control

- (a) Pursuant to CP 037-7958-0062, issued on February 18, 1997, and in order to comply with Condition D.1.1, the baghouse (DC-227) for particulate control shall be in operation and control emissions from the mixer (MX-205) at all times the mixer is in operation.
- (b) In order to comply with Condition D.1.1, the baghouses, including those integral to the process, for particulate control shall be in operation and control emissions from facilities RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, BN-108, LS-712, LS-722, HE-116, and HE-216 at all times these facilities are in operation.
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed unit have been repaired or replaced.

- (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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

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.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (m) One (1) South Storage Bin, identified as BN-730, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (n) One (1) South Bin Loadout Spout, identified as LS-732, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (o) One (1) Railroad Loadout Spout, identified as LS-752, constructed in 1991, with a maximum capacity of 100,000 pounds per hour, with emissions controlled by baghouse DC-754 (not integral), and exhausting to stack 754.
- (p) One (1) Storage Bin, identified as BN-910, constructed in 1999, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (q) One (1) Bulk Bagger/Screw Conveyor, identified as BA-914/SC-911, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (r) One (1) Storage Bin, identified as BN-810, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (s) One (1) 3-Spout Packer unit, identified as BA-811, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (t) One (1) Belt Conveyor, identified as BC-101, constructed in 1998, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (u) One (1) Belt Conveyor, identified as BC-102, constructed in 1991, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (v) One (1) Portable Tile Crusher, identified as CR-410, constructed in 1997, with a maximum capacity of 30,000 pounds per hour, a source of fugitive emissions.

(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 2-6.1-5(a)(1)]

D.2.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, (Particulate Emission Limitations), the allowable particulate emission rate from facilities BN-730, LS-732, LS-752, BN-910, BA-914,/SC-911, BN-810, and BA-811 shall not exceed 0.03 grains per dry standard cubic foot.

D.2.2 Preventive 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 baghouses, including those baghouses that are integral to the process.

Compliance Determination Requirements

D.2.3 Particulate Control

- (a) In order to comply with Condition D.2.1, the baghouses for particulate control shall be in operation and control emissions from the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), and the 3-Spout Packer unit (BA-811) at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emissions Notations

- (a) Visible emission notations of the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), and the 3-Spout Packer unit (BA-811) stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) 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.2.5 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), and the 3-Spout Packer unit (BA-811) at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 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- to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to

take response steps in accordance with Section C - to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.2.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed unit have been repaired or replaced.
- (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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

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 Requirement

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), and the 3-Spout Packer unit (BA-811) stack exhausts once per day.
- (b) To document compliance with Condition D.2.5, the Permittee shall maintain records once per day of the pressure drop during normal operation.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.2.8 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.670(f), the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1 for the mineral processing operations, in accordance with the schedule in 40 CFR 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.19, the Permittee shall submit all of the required notifications and reports to:

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

D.2.9 New Source Performance Standard for Nonmetallic Mineral Processing Plants Requirements [40 CFR Part 60, Subpart OOO] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart OOO, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart OOO, which are incorporated by reference as 326 IAC 12, for the mineral processing operations identified as the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), 3-Spout Packer unit (BA-811), Belt Conveyor (BC-101), Belt Conveyor (BC-102), and Tile Crusher (CR-410) as specified as follows.

Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 51 FR 31337, Aug. 1, 1985, 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; and stand-alone screening operations at plants without crushers or grinding mills.

(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, 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, reconstruction, or modification 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 apply and those that do not apply to owners and operators of affected facilities subject to this subpart.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 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 process operations 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 process operations 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.

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:

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

(b) Sand and Gravel.

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

(d) Rock Salt.

(e) Gypsum.

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

- (g) Pumice.
- (h) Gilsonite.
- (i) Talc and Pyrophyllite.
- (j) Boron, including Borax, Kernite, and Colemanite.
- (k) Barite.
- (l) Fluorospar.
- (m) Feldspar.
- (n) Diatomite.
- (o) Perlite.
- (p) Vermiculite.
- (q) Mica.
- (r) 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.

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).

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) or 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 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.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 60.672 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and

(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of §60.676 (c), (d), and (e).

(b) On and after the sixtieth day 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 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

(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), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.

(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

(f) On and after the sixtieth day 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 of this part, no

owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

(g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

§ 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.

§ 60.675 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 appendix A 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 particulate matter standards in §60.672(a) as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, 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 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) and (c), the owner or operator shall use Method 9 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, Section 2.1) must be followed.

(2) 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, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 10 percent opacity; and

(ii) There are no more than 3 readings of 10 percent for the 1-hour period.

(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

(g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

§ 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.

(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 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).

(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated 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.

[54 FR 6680, Feb. 14, 1989, as amended at 62 FR 31360, June 9, 1997]

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

- (aa) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Parts washer using mineral spirits which commenced operation in 1981.
- (ee) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment.
- (gg) Paved and unpaved roads and parking lots with public access.

(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 2-6.1-5(a)(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

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

D.3.2 Particulate [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), (Particulate Emission Limitations), the allowable particulate emission rate from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed 0.03 grains per dry cubic standard foot.

**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:	Unimin Corporation – Huntingburg Facility
Address:	1405 Industrial Park Drive
City:	Huntingburg, Indiana 47542
Phone #:	(812) 683-2179
MSOP #:	037-12727-00062

I hereby certify that Unimin Corporation is still in operation.
 no longer in operation.

I hereby certify that Unimin Corporation is in compliance with the requirements of MSOP 037-12727-00062.
 not in compliance with the requirements of MSOP 037-12727-00062

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 ?_____, 100TONS/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 PERM 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:

APPENDIX A
UNIMIN CORPORATION – HUNTINGBURG FACILITY
FUGITIVE PARTICULATE MATTER EMISSIONS
CONTROL PLAN

Per 326 IAC 6-5-1(b), the Huntingburg facility is required to prepare a control plan for fugitive particulate matter emissions. The contents of the Control Plan is set down in writing as per 326 IAC 6-5-5(a) and contains the information identified in 326 IAC 6-5-5 (1) through (12). Per 326 IAC 6-5-8, the Control Plan will be updated at the time of reapplication for Huntingburg’s operating permit.

- (1) Source: Unimin Corporation - Huntingburg Clay Processing Facility
P.O. Box 194, 1405 Industrial Park Drive
Huntingburg, IN 47542

- (2) Owner/Operator Responsible for the Execution of the Control Plan: Same as above
Contact: Kevin Heckel, Plant Manager
Tel: 812-683-2179
Fax: 812-683-2195

- (3) Identification of Potential Emission Sources
Fugitive particulate matter emissions are generated from multiple sources at the Huntingburg plant site. Per 326 IAC 6-5-4, the emission sources are identified as the following emission points:
 - (a) Paved roads, unpaved roads, and parking lots;
 - (b) Open aggregate piles;
 - (c) Outdoor conveying of aggregate material;
 - (d) Transfer of aggregate material;
 - (e) Transportation of aggregate material by truck, front end loader, or similar vehicles;
 - (f) Loading and unloading operations of material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles;
 - (g) Solid waste handling;
 - (h) Material handling operations such as crushing, grinding, screening, and mixing;
 - (i) Escape through building openings such as doors, windows, powered or unpowered ventilators, and roof monitors other than a stack.

- (4) Site map
A site map is available at the site.

- (5) Vehicular Activity

Vehicles	Trips/hour	Speed (mph)	Distance (Miles per trip)	Gross/Tare Weights (tons)
Tractor Trailer	<1	10	0.03	40/18
Tandem Truck	<1	10	0.01	35/15
Plant vehicle	<1	10	0.04	0.5/0.5

- (6) Type and Quantity of material handled
Stockpiles consist predominantly of clay mineral products. All material is inert. The material is blended to create bulk and/or bagged products, which depend upon customer specifications. The quantity of material handled is held confidential.

- (7) Equipment used to maintain aggregate piles
Outdoor stockpiles are produced by truck dumping; and removed by front-end loader. Clay trucks are tarped. A clay shredder discharges clay directly into covered storage bays. A tile crusher discharges broken bathroom tile directly into a covered storage bay. Other raw materials are put in place by a front-end loader or truck. A front-end loader removes all material.

- (8) Description of Control Measure
Described below under CONTROL MEASURES.
- (9) Specification of dust suppressant material
Based on the design and configuration of the facility, dust suppressant is not a recommended method of controlling fugitive emission. Unimin has designed and implemented other forms of fugitive particulate matter emission control.
- (10) Specifications of the particulate matter collection equipment
Specifications of the particulate matter collection equipment are identified in the IDEM air permit 039-12727-00062, which may be amended from time to time.
- (11) Schedule of Compliance
A schedule of compliance is not in place, nor required at the Huntingburg facility.
- (12) Recordkeeping
Unimin will maintain records for three years, which document all control measures and activities to be implemented for this control plan. Most of the maintenance records will be maintained on the Qqest electronic database and can be recalled at the request of an inspector.

CONTROL MEASURES

Control measures for fugitive particulate matter emissions generated from the emission points listed in Item 3, are identified below:

- (a) Paved Roads, unpaved roads, and parking lots
The plant is located at the end of a paved city-owned road. The plant does not maintain the city road. There is less than one tenth of an acre of unpaved driveway for loading bagged product onto tractor-trailers. The parking area is an insignificant source of fugitive emission. A concrete pad, approximately three tenths of an acre in size, is located below the outdoor process equipment. Fugitive emissions are minimized by controlling emissions on the process equipment (i.e. covered conveyance, baghouses) and by applying good housekeeping practices.
- (b) Open aggregate piles
Open stockpiles are located on two sides of the plant. To mitigate stockpile emissions, Unimin has implemented a number of strategies including:
 - (1) Minimizing stockpile size – Stockpiles formerly covering 6 acres has been reduced to almost half that size. Former stockpile areas have been graded, covered with topsoil and re-vegetated. Maintaining smaller stockpiles will continue as part of operational practices to reduce on-site inventories.
 - (2) Placing stockpiles under cover – A number of storage bays have been created under stationary cover to store raw materials away from the wind and rain.
 - (3) Tarping and vegetating stockpiles – Unimin has on occasion used tarps and vegetated piles to reduce wind erosion and will implement these measures on a case-by-case basis.
- (c) Outdoor conveying of aggregate material
Unimin minimizes fugitive emissions from process equipment by covering conveyor belts.
- (d) Transfer of aggregate material
Emissions are generated when aggregate material is transferred from the shredder to a stockpile. Fugitive emissions are reduced by operating in unexposed locations. The shredder is operated under cover and discharges into a storage bay. When possible, the equipment use will be

restricted in exceptionally windy conditions.

- (e) **Transportation by truck, front end loader or train**
Trucks, which haul clay to the facility, use tarps for emission control. A front-end loader is used to transfer raw materials into open hoppers. Fugitive emissions have been minimized by locating the two batch hoppers in an unexposed area adjacent to the process building. Transport distances on-site are short (< 600 feet), however when possible, the truck loading (from rail cars) and truck unloading will be restricted in exceptionally windy conditions.
- (f) **Loading and unloading operations of material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles**
Raw material loading/unloading operations have been discussed elsewhere in this Control Plan. Product is loaded into silos for transfer to truck and railcars. Emissions from the loadout spouts are controlled by the silo baghouses. Pre-1999, the greatest source of fugitive emissions was caused by silo over-filling. Unimin installed “high level indicators” in all silos, which triggers a warning light to inform the operator, who then shuts down the fill lines. This tool has worked very effectively.
- (g) **Solid Waste Handling**
Office and plant waste is placed in designated waste bins and hauled off-site by disposal contractors. Mineral waste is recycled into the plant process wherever feasible. A Plant Waste Disposal Policy/Procedure was generated in 2000 for proper management of plant wastes.
- (h) **Material handling operations such as crushing, grinding, screening, and mixing**
Grinding and screening do not occur at the Huntingburg plant. Milling and mixing operations are vented to fabric filters. A stationary tile crusher is located outdoors. Bathroom wall tile is crushed and discharged into a covered storage bay for use as a raw material.
- (i) **Escape through building opening such as doors, windows, powered or unpowered ventilators, roof monitors, other than a stack**
Unimin follows an equipment maintenance program (Qqest) to ensure proper maintenance of the process equipment and particulate collection system. Unimin obtained written approval from Craig Lawson (IDEM Office of Water Management, Pre-Treatment & Urban Wet Weather Section) to use a floor sweeper to wash the floors to minimize fugitive emissions within the plant and warehouse. In so far as sources of fugitive emissions can also be sources of stormwater pollutants, Unimin has generated and implemented a Stormwater Pollution Prevention Plan (SWPPP) to reduce and mitigate potential sources of pollutants.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Minor Source Operating Permit

Source Background and Description

Source Name: Unimin Corporation - Huntingburg Facility
Source Location: 1405 Industrial Park Dr., Huntingburg, Indiana 47542
County: Dubois
SIC Code: 1453
Operation Permit No.: M037-12727-00062
Permit Reviewer: ERG/ST

On August 25, 2006, the Office of Air Quality (OAQ) had a notice published in The Herald, located in Jasper, Indiana, stating that Unimin Corporation - Huntingburg Facility had applied for a Minor Source Operating Permit (MSOP) to operate a stationary mineral (fireclay) processing facility, with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 6, 2006, the source (Unimin) submitted comments on the proposed MSOP. The summary of the comments is as follows:

Comment 1: In December 2005, Unimin added a new dust collector to an existing bin (BN-108). The bin is no longer a source of fugitive emissions and should be listed with the Clay Storage and Loading process. The flow rate of DC-217 should be 10,000 acfm in the calculations (Appendix A). The fugitive emission sources listed in A.2(z) were constructed before August 1983. In addition, the clay shredder is a self contained portable unit that consists of four pieces of equipment (SH-001, FE-001, BC-001, and BC-002). Please revise the description. The fugitive Dust Control Plan was submitted to IDEM on October 11, 2001 and updated on July 2, 2002. Please change the date references in Condition C.4.

IDEM Response to Comment 1: The permit has been changed to reflect the changes in the descriptions of the emission units. IDEM lists the date on which the document was received by IDEM, rather than the date on which the Permittee submitted the document to IDEM. The permit has been revised as follows:

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

...

(z) One (1) Bin, identified as BN-108, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by baghouse DC-130, and exhausting to stack 130.

(zaa) Activities with particulate matter emissions equal to or less than 5 tons per year: Fugitive emission sources **constructed before August 1983**: Belt conveyors ~~BC-001, BC-002, BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, and BC-011;~~ Bins ~~BN-108~~

and **Bin BN-208, Portable Clay Shredder (including Shredder SH-001, Feeder FE-001, and Belt Conveyors BC-001, BC-002), and Hopper HO-100.**

(aabb) . . .

C.4 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 plan submitted to IDEM on October 16, 2001 and updated on July 2, 2002. The Fugitive Dust Control Plan is attached to this permit as Appendix A.**

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

. . .

- (z) **One (1) Bin, identified as BN-108, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by baghouse DC-130, and exhausting to stack 130.**
- (zaa) Activities with particulate matter emissions equal to or less than 5 tons per year: Fugitive emission sources **constructed before August 1983:** Belt conveyors ~~BC-001, BC-002, BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, and BC-011;~~ **Bins BN-108 and Bin BN-208, Portable Clay Shredder (including Shredder SH-001, Feeder FE-001, and Belt Conveyors BC-001, BC-002), and Hopper HO-100.**

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

D.1.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (Particulate Emission Limitations), the allowable particulate emission rate from facilities MX-205, RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, **BN-108**, LS-712, LS-722, HE-116, and HE-216, shall not exceed 0.03 grains per dry cubic standard foot.

D.1.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5, fugitive particulate matter emissions from HO-200, HO-400, HO-500, ~~BC-001, BC-002, BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, BC-011, BN-108, BN-208, ~~SH-001, FE-001,~~ **Portable Clay Shredder**, and HO-100 shall be controlled according to the plan submitted to IDEM on October 16, 2001 and **updated on July 2, 2002.** The plan identifies which measures will be taken to mitigate fugitive particulate matter emissions from open aggregate piles, outdoor conveying of aggregate material, transfer of aggregate material, transportation of material, loading and unloading operations, solid waste handling, and material handling operations. The **Fugitive Dust Control Plan** ~~plan~~ is attached as Appendix A.~~

Compliance Determination Requirements

D.1.3 Particulate Control

. . .

- (b) In order to comply with Condition D.1.1, the baghouses, including those integral to the process, for particulate control shall be in operation and control emissions from facilities RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, **BN-108**, LS-712, LS-722, HE-116, and HE-216 at all times these facilities are in operation.

The calculations worksheet has also been revised in response to this comment. See Appendix A to the Addendum (attached).

Comment 2: The hopper emission units HO-200, HO-400 and HO-500 listed in Section D.1 of the permit are loaded by truck dumping. Please revise the description. Also, please clarify if these emission units are subject to or exempt from the requirements of 40 CFR 60, Subpart OOO.

IDEM Response to Comment 2: 40 CFR 60.670 does not specifically list material loading operations and temporary hoppers as facilities subject to the requirements of 40 CFR 60, Subpart OOO. Further, 40 CFR 60.672(d) reads: "Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section." Therefore, pursuant to 40 CFR 60.672(d), the hopper emission units HO-200, HO-400 and HO-500 are exempt from the particulate matter standards in 40 CFR 60.672. There are no applicable requirements for HO-200, HO-400 and HO-500 under 40 CFR 60, Subpart OOO. The permit has been revised as follows:

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

...

- (w) One (1) Hopper, identified as HO-200, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (x) One (1) Hopper, identified as HO-400, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (y) One (1) Hopper, identified as HO-500, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]:

...

- (w) One (1) Hopper, identified as HO-200, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (x) One (1) Hopper, identified as HO-400, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (y) One (1) Hopper, identified as HO-500, constructed in 1997, **loaded by truck dumping**, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.

Comment 3: Belt Conveyors BC-101 and BC-102 are sources of fugitive emissions and should be listed with other fugitive emissions sources in A.2(z) and D.1.

IDEM Response to Comment 3: The descriptions for Belt Conveyors BC-101 and BC-102 indicate that these emission units are sources of fugitive emissions. Also, Belt Conveyors BC-101 and BC-102 are subject to 40 CFR 60, Subpart OOO and are listed in Section D.2 with other emission units subject to 40 CFR 60, Subpart OOO. No changes will be made as a result of this comment.

Comment 4: In Condition D.2.1, change the phrase "grains per dry cubic standard foot" to "grains per dry standard cubic foot".

IDEM Response to Comment 4: The permit has been revised as follows:

D.2.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, (Particulate Emission Limitations), the allowable particulate emission rate from facilities BN-730, LS-732, LS-752, BN-910, BA-914,/SC-911, BN-810, and BA-811 shall not exceed 0.03 grains per dry cubic standard cubic foot.

Comment 5: Please correct the pressure drop range in Condition 2.5 to "1 to 6 inches of water." This is the normal operating range of these baghouses as demonstrated in stack tests required by 40 CFR 60, Subpart OOO.

IDEM Response to Comment 5: The permit has been revised as follows:

D.2.5 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), and the 3-Spout Packer unit (BA-811) at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~3-0~~ **1.0** 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- to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - to Excursions or Exceedances, shall be considered a deviation from this permit.

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

Comment 6: The cover letter of the Unimin application was dated October 5, 2000. Please change the date on page 1 of the Technical Support Document (TSD) to reflect the date the application was submitted.

IDEM Response to Comment 6: IDEM lists the date on which the document was received by IDEM, rather than the date on which the Permittee submitted the document to IDEM. No changes have been made as a result of this comment.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. Effective August 7, 2006, the one hour ozone standard was revoked in Indiana. The Technical Source Document (TSD) should read:

County Attainment Status

The source is located in Dubois County.

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

Note: On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

- (a) Dubois County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability-Entire source section.
- (b) Volatile organic compounds (VOC) emissions 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. Dubois 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. See the State Rule Applicability – Entire Source section.
- (c) Dubois 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. See the State Rule Applicability – Entire Source section.

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support document that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

- 2. Section A.1 of the draft permit should have stated that Dubois County is now designated as nonattainment for PM2.5. The permit has been corrected as follows:

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 mineral (fireclay) processing facility.

Authorized Individual:	Vice President
Source Address:	1405 Industrial Park Dr., Huntingburg, IN 47542
Mailing Address:	P. O. Box 194, Huntingburg, IN 47542
SIC Code:	1455
Phone Number:	(812) 683-2179
Source Location Status:	Dubois
County Status:	Nonattainment for the PM2.5 Standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit (MSOP) Minor Source, under PSD and Non-Attainment NSR; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

PM Emission Calculations

Fire Clay Processing

Company Name: Unimin Corporation - Huntingburg Facility

Address: Huntingburg, IN 47542

MSOP Permit No: M037-12727-00062

Reviewer: ERG/ST

Date: August 15, 2006 October 2, 2006

Process	Unit	Unit ID	Stack ID	Exhaust Flow Rate (acfm)	Estimated Control Efficiency (%)	Maximum Process Throughput (ton/hr)	PM Emission Factor (lb/ton)	Footnote	Uncontrolled Potential To Emit (ton/yr)	Controlled Potential To Emit (ton/yr)	NSPS Subpart OOO (<0.02 gr/dscf)		326 IAC 6-1-2 (<0.03 gr/dscf)		Potential To Emit for source determination ** (ton/yr)
											(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	
01 Clay Blends Mixing	Mixer	MX-205	227	1000	99.9	20	0.078	a, **	6.83	0.01	-	-	0.26	1.13	6.83
02 Milling System #1	Mill/Whizzer	RL-110/111	117	10000	99.995	10	1700	b	74460	3.72	-	-	2.57	11.26	3.72
03 Milling System #2	Mill/Whizzer	RL-210/211	217	6000 10000	99.995	18	1700	b	134028	6.70	-	-	0.00	0.00	6.70
04 Clay Storage & Loading	Silo #1	SI-610	612	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	Silo #2	SI-620	622	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	Silo #3	SI-630	632	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	North Bin	BN-710	714	1000	99.0	100	0.00175	c	76.65	0.77	-	-	0.26	1.13	0.77
	North Bin Spout	LS-712			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
	Middle Bin	BN-720	724	1000	99.0	100	0.00175	c	76.65	0.77	-	-	0.26	1.13	0.77
	Middle Bin Spout	LS-722			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
	South Bin	BN-730	732	1000	99.0	100	0.00175	c	76.65	0.77	0.17	0.75	0.26	1.13	0.77
	South Bin Spout	LS-732			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
		Bin	BN-108	130	1200	99.99 99.0	10	0.000048	d	2.10E-03	2.10E-03	-	-	-	-
	RR Loading	LS-752	754	1000	99.0	50	0.00175	c, **	38.33	0.38	0.17	0.75	0.26	1.13	38.3
05 Bagging/Palletizing	Bulk Bag Bin	BN-910	912	1000	99.0	10	0.00175	c	7.66	0.08	0.17	0.75	0.26	1.13	0.08
	Bulk Bag Loading	SC-911/BA-914			99.0	10	0.0045	c	19.71	0.20	-	-	-	-	0.20
	Bagger Bin	BN-810	807	4000	99.0	10	0.00175	c	7.66	0.08	0.69	3.00	1.03	4.50	0.08
	3 Spout Packer	BA-811			99.0	10	0.0045	c	19.71	0.20	-	-	-	-	0.20
Various Fugitive Sources	Belt Conveyor	BC-001	-	-	0.0	100	0.000048	d	0.02	0.02	-	-	-	-	0.02
	Belt Conveyor	BC-002	-	-	0.0	100	0.000048	d	0.02	0.02	-	-	-	-	0.02
	Belt Conveyor	BC-101	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-102	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-201	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-202	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-203	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-204	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-401	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-411	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-501	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-011	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Bin	BN-108	-	-	0.0	40	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Bin	BN-208	-	-	0.0	18	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Shredder	SH-001	-	-	0.0	100	0.0007	d	0.31	0.31	-	-	-	-	0.31
	Crusher	CR-410	-	-	0.0	20	0.0007	d	0.06	0.06	-	-	-	-	0.06
	Hopper	HO-100	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
Hopper	HO-200	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00	
Hopper	HO-400	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12	
Hopper	HO-500	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12	

** Note that all baghouses, except DC-130, DC-227 and DC-754 (controlling emissions from stacks 130, 227 and 754, respectively), are considered integral.

Total Controlled PTE (ton/yr) = 17.4

Total Limited PTE (ton/yr) = 23.3

Total PTE for source permitting status (ton/yr) = 62.2

a- Emission factors from AP-42:Table 11.12-2 (concrete batch mixer loading)

b- Emission factors assume 99% loss as a worst case estimate

c- Emission factors are for controlled operations from AP-42: Table 11.26-1 (Talc processing). Used because

AP-42 factors for fire clay processing do not contain EFs for the respective operations.

d- Emission factors for fugitive sources are from AP-42: Table 11.26-1 (Talc processing). The EF used

is for controlled operations because of the moisture content of the material is high enough to mitigate particulate emissions.

Note that several facilities exhaust to a shared baghouse. Therefore, limited emissions from these facilities are presented together because the applicable NSPS and 326 IAC 6-1-2 limitations are in terms of gr/dscf.

Note that despite what the emission calculations may indicate, the manufacturer of the baghouses guarantees that any facility using the baghouses will be in compliance with 40 CFR Part 60 Subpart OOO.

METHODOLOGY

Uncontrolled Potential Emissions (for Mixing, Milling and fugitive) (ton/yr) = emission factor (lb/ton) x maximum throughput (ton/hr) x 8760 (hr/yr) x 1/2000 (ton/lb)

Uncontrolled Potential Emissions (all other units) (ton/yr) = controlled emissions (ton/yr) / (1- control efficiency (%) / 100)

Controlled Potential Emissions (for Mixing and Milling) (ton/yr) = Uncontrolled Potential Emissions (ton/yr) x (1- control efficiency (%) / 100)

Controlled Potential Emissions (all other units) (ton/yr) = controlled emission factor (lb/ton) x maximum throughput (ton/hr) x 8760 (hr/yr) x 1/2000 (ton/lb)

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

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

Source Background and Description

Source Name:	Unimin Corporation - Huntingburg Facility
Source Location:	1405 Industrial Park Dr., Huntingburg, IN 47542
County:	Dubois
SIC Code:	1453
Permit No.:	037-12727-00062
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed an application from Unimin Corporation - Huntingburg Facility relating to the operation of a stationary mineral (fireclay) processing facility.

History and Background

Unimin acquired the United Clays, Inc. facility located at 1405 Industrial Park Drive in Huntingburg, IN on October 12, 1999. Unimin notified IDEM of the transfer of ownership via letter dated November 19, 1999. A facility-wide operating permit application was submitted on September 18, 2000. Upon review of the application, IDEM determined that the source was subject to the Part 70 permit program pursuant to 326 IAC 2-7. The original application was withdrawn by Unimin in order to make minor technical changes and replaced on October 6, 2000. The source provided information pertaining to the integral nature of numerous baghouses to the process located at the source on January 24, 2002 and May 29, 2002. Upon receipt and review of this information, IDEM determined that an MSOP, rather than a Part 70 Operating Permit, was appropriate.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One Mixer, identified as MX-205, constructed in 1997, with a maximum throughput of 40,000 pounds per hour, with emissions controlled by baghouse DC-227 (not integral), and exhausting to stack 227.
- (b) One (1) Roller Mill/Whizzer Separator, identified as RL-110/111, constructed in 1981, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack 117.
- (c) One (1) Roller Mill/Whizzer Separator, identified as RL-210/211, constructed in 1982, with a maximum throughput of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack 217.
- (d) One (1) Silo, identified as SI-610, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-612, and exhausting to stack 612.
- (e) One (1) Silo, identified as SI-620, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-622, and exhausting to stack 622.
- (f) One (1) Silo, identified as SI-630, constructed before August 1983, with a maximum capacity of 36,000 pounds per hour, with emissions controlled by integral baghouse DC-632, and exhausting to stack 632.

- (g) One (1) North Storage Bin, identified as BN-710, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (h) One (1) Middle Storage Bin, identified as BN-720, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (i) One (1) North Bin Loadout Spout, identified as LS-712, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-714, and exhausting to stack 714.
- (j) One (1) Middle Bin Loadout Spout, identified as LS-722, constructed before August 1983, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-724, and exhausting to stack 724.
- (k) One (1) Mill #1 Heater, identified as HE-116, constructed in 1981, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-117, and exhausting to stack DC-117.
- (l) One (1) Mill #2 Heater, identified as HE-216, constructed in 1982, with a maximum heat input capacity of five (5) million BTU per hour, with emissions controlled by integral baghouse DC-217, and exhausting to stack DC-217.
- (m) One (1) South Storage Bin, identified as BN-730, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (n) One (1) South Bin Loadout Spout, identified as LS-732, constructed in 1991, with a maximum capacity of 200,000 pounds per hour, with emissions controlled by integral baghouse DC-734, and exhausting to stack 734.
- (o) One (1) Railroad Loadout Spout, identified as LS-752, constructed in 1991, with a maximum capacity of 100,000 pounds per hour, with emissions controlled by baghouse DC-754 (not integral), and exhausting to stack 754.
- (p) One (1) Storage Bin, identified as BN-910, constructed in 1999, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (q) One (1) Bulk Bagger/Screw Conveyor, identified as BA-914/SC-911, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-912, and exhausting to stack 912.
- (r) One (1) Storage Bin, identified as BN-810, constructed before August 1983, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (s) One (1) 3-Spout Packer unit, identified as BA-811, constructed in 1991, with a maximum capacity of 20,000 pounds per hour, with emissions controlled by integral baghouse DC-807, and exhausting to stack 807.
- (t) One (1) Belt Conveyor, identified as BC-101, constructed in 1998, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (u) One (1) Belt Conveyor, identified as BC-102, constructed in 1991, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.

- (v) One (1) Portable Tile Crusher, identified as CR-410, constructed in 1997, with a maximum capacity of 30,000 pounds per hour, and a source of fugitive emissions.
- (w) One (1) Hopper, identified as HO-200, constructed in 1997, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (x) One (1) Hopper, identified as HO-400, constructed in 1997, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (y) One (1) Hopper, identified as HO-500, constructed in 1997, with a maximum capacity of 40,000 pounds per hour, and a source of fugitive emissions.
- (z) Activities with particulate matter emissions equal to or less than 5 tons per year: Fugitive emission sources: Belt conveyors BC-001, BC-002, BC-201, BC-202, BC-203, BC-204, BC-401, BC-411, BC-501, and BC-011; Bins BN-108 and BN-208, Shredder SH-001, Feeder FE-001, and Hopper HO-100.
- (aa) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: Parts washer using mineral spirits which commenced operation in 1981.
- (bb) Combustion source flame safety purging on startup.
- (cc) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (dd) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F): Use of cans of citrus and penetrating oil.
- (ee) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment.
- (ff) Replacement and repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment: Baghouse bags and air filters.
- (gg) Paved and unpaved roads and parking lots with public access.
- (hh) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment: Secondary containment for 500 gallon portable diesel storage tank.
- (ii) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (jj) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983.
- (kk) Purge double block and bleed valves.
- (ll) Filter or coalescer media changeout.
- (mm) A laboratory as defined in 326 IAC 2-7-1(21)(D).

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

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

- (a) Registration 037-00062, issued January 8, 1991;
- (b) CP 037-2683-00062, issued March 12, 1993;
- (c) Exemption 037-7958-00062, issued February 18, 1997; and
- (d) Exemption 037-8726-00062, issued August 8, 1997;

All conditions from previous approvals were incorporated into this MSOP.

Air Pollution Control Justification as an Integral Part of the Process

While under review for an MSOP, the company has submitted the following justification such that dust collectors/baghouses DC-117, DC-217, DC-612, DC-622, DC-632, DC-714, DC-724, DC-734, DC-807 and DC-912 be considered as an integral part of the manufacture of fireclay:

Baghouses DC-117 and DC-217 are each connected to their respective Raymond mills (RL-110/111 and RL-210/211). The baghouses are a fundamental component to the milling operation because (1) they maintain a negative pressure throughout the system, and (2) they work in conjunction with a cyclone to collect product and return it to the circuit. Based on a confidential economic analysis provided by the source, the value of the product recovered by DC-117 and DC-217 far exceeds the total capital and operating costs of the baghouses. The payback period associated with the capital costs and operation of DC-117 and DC-217 is approximately five months. As a result, the baghouses DC-117 and DC-217 serve a primary purpose other than pollution control and have an overwhelming positive net economic effect.

Baghouses DC-612, DC-622, DC-632, DC-714, DC-724, DC-734, DC-807 and DC-912 are mounted on three silos and five bins. The silos/bins are loaded with product or raw material pneumatically through the baghouse with the primary purpose to: 1) neutralize the bin pressure, and 2) separate raw materials from air for shipment. Maintenance of the air pressures is necessary for the effective and safe operation of the equipment. Without the existence of the baghouses, positive pressure would quickly build up in the silos and bins, causing structural failure of the equipment and loss of all of the product or raw material conveyed. Based on a confidential economic analysis provided by the source, the value of the product recovered by baghouses DC-612, DC-622, DC-632, DC-714, DC-724, DC-734, DC-807 and DC-912 far exceeds the total capital and operating costs of the dust collectors. The payback period associated with the capital costs and operation of the baghouses is approximately 1 year. As a result, baghouses DC-612, DC-622, DC-632, DC-714, DC-724, DC-734, DC-807 and DC-912 serve a primary purpose other than pollution control and have an overwhelming positive net economic effect.

IDEM, OAQ has evaluated the justifications and agreed that baghouses DC-117, DC-217, DC-612, DC-622, DC-632, DC-714, DC-724, DC-734, DC-807 and DC-912 will be considered as an integral part of the processing of fireclay. Therefore, the permitting level will be determined using the potential to emit after the baghouses. Operating conditions in the proposed permit will specify that the baghouses shall operate at all times when the fireclay manufacturing process is in operation. The determination that these baghouses are integral to the process was made during the MSOP review process.

Note that baghouses DC-227 and DC-754, controlling emissions from MX-205 and LS-752, respectively, are not integral to the process.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
117	Mill #1 Circuit	30	2	10,000	140
217	Mill #2 Circuit	30	2	6,000	140
227	Mixer	22	4" x 4"	1,000	ambient
612	Silo #1	55	4" x 8"	1,000	ambient
622	Silo #2	55	4" x 8"	1,000	ambient
632	Silo #3	55	4" x 8"	1,000	ambient
714	North Bin	45	4" x 8"	1,000	ambient
724	Middle Bin	45	4" x 8"	1,000	ambient
734	South Bin	45	4" x 8"	1,000	ambient
754	Railroad Loadout	25	4" x 8"	1,000	ambient
807	3-spout Packer	30	4" x 8"	4,000	ambient
912	Bulk Bagger	15	4" x 8"	1,000	ambient

Recommendation

The staff recommends to the Commissioner that the MSOP be approved. This recommendation is based on the following facts and conditions:

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

An administratively incomplete FESOP application was received on September 22, 2000 and additional information was received on March 19, 2001. The source provided information pertaining to the integral nature of numerous baghouses located at the source on January 24, 2002 and May 29, 2002. Upon receipt of this information, the IDEM, OAQ determined that a MSOP was appropriate. Additional information pertaining to the operating parameters of the baghouses was received on November 8, 2002.

There was no notice of completeness mailed to the source.

Emission Calculations

See Appendix A page 1 for emissions calculations.

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions 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, the department, or the appropriate local air pollution control agency.”

The total PTE from the emission units is reflected in the table below. For emission units with control that has not been determined to be integral to the process, the PTE is calculated before the effect of the control device. For emission units with control that has been determined to be integral to the process, the PTE was calculated after the effect of the integral baghouses

Pollutant	Potential to Emit (tons/yr)
PM	62
PM10	62
PM2.5	62
SO ₂	0
VOC	0.2
CO	2.9
NOx	3.5

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants are less than 100 tons per year, the potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM-10 is greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1 an MSOP will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP and the potential to emit of a combination of HAPs are negligible. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Dubois County.

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

- (a) Dubois County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability-Entire source section.
- (b) Volatile organic compounds (VOC) emissions 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. Dubois 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. See the State Rule Applicability – Entire Source section.
- (c) Dubois 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. See the State Rule Applicability – Entire Source section.

Source Status

Existing Source PSD, and Nonattainment NSR Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	30
PM10	30
PM2.5	30
SO ₂	0
VOC	0.2
CO	2.9
NO _x	3.5
Single HAP	Negligible
Combination HAPs	Negligible

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on information provided by the source. Note that facilities BN-730, LS-732, LS-752, BN-910, BA-914/SC-911, and BA-811 are limited to 0.02 grain/dscf per 40 CFR 60 Subpart OOO; and facilities MX-205, RL-110/111, RL-210/211, BN-810, SI-610, SI-620, SI-630, BN-710, LS-712, LS-722, BN-910, HE-116, and HE-216 are limited to 0.03 grain/dscf per 326 IAC 6-1-2. Fugitive PM and PM-10 have not been included in this summary because there is not an applicable New Source Performance Standard that was in effect on August 7, 1980.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP037-12727-00062, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) This source is subject to the requirements of the New Source Performance Standard for Nonmetallic Mineral Processing Plants (40 CFR 60, Subpart OOO) because this source operates a fireclay processing plant and fireclay is a nonmetallic mineral, as defined in 40 CFR 60.671. Pursuant to 40 CFR 60.670, the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), 3-Spout Packer unit (BA-811), Belt Conveyor (BC-101), Belt Conveyor (BC-102), and Tile Crusher (CR-410) are affected facilities subject to the requirements of this subpart because these facilities are crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, or enclosed truck or railcar loading stations located at a fixed nonmetallic mineral processing plant and commenced construction, reconstruction, or modification after August 31, 1983.

The emission units identified as the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), 3-Spout Packer unit (BA-811), Belt Conveyor (BC-101), Belt Conveyor (BC-102), and Tile Crusher (CR-410) are subject to the following portions of Subpart OOO. Non applicable portions of the NESHAP will not be included in the permit.

- (1) 40 CFR 60.670(a), (d), (e), (f)
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672(a), (b), (d), (e), (f), (g)
- (4) 40 CFR 60.673
- (5) 40 CFR 60.675(a), (b)
- (6) 40 CFR 60.675(c)(1)(i), (ii)
- (7) 40 CFR 60.675(c)(2), (3)
- (8) 40 CFR 60.675(d), (g)
- (9) 40 CFR 60.676(a), (f), (h), (i), (j)
- (10) Table 1 to 40 CFR 60, Subpart OOO

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subpart OOO.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit. This source is a minor source of HAP, as defined in 40 CFR 63.2.
- (c) The requirements of the National Emission Standards for Halogenated Solvent Cleaning (326 IAC 20-6, 40 CFR 63, Subpart T) are not included in this permit for the degreasing operations. The cold solvent cleaning machine does not use a solvent containing methylene chloride, perchlorethylene, trichlorethylene, 1,1,1-trichlorethane, carbon tetrachloride, chloroform or any combination of these halogenated HAP solvents in a total concentration greater than five percent (5%) by weight as a cleaning or drying agent.

State Rule Applicability – Entire Source

326 IAC 2-3 Emission Offset

Dubois County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled “Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas” authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source’s PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area as a source that emits or has the potential to emit 100 tpy of any regulated pollutant. Unimin Corporation has a potential to emit of PM10 below 100 tpy. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-3 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Dubois County and the potential to emit, including fugitive emissions, of all pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

This source is located in Dubois County, but it is not located in Bainbridge Township. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

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

326 IAC 6.5-1-2 (Particulate Emissions)

This source is subject to 326 IAC 6.5-1-2 (Particulate Emissions Limitations), because it is located in Dubois Co. and has actual particulate emissions greater than ten (10) tons per year.

Pursuant to 326 IAC 6.5-1-2, the particulate emissions from facilities MX-205, RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, BN-730, LS-712, LS-722, LS-752, BN-910, BA-914/SC-911, BN-810, BA-811, HE-116, and HE-216, shall not exceed 0.03 grains per dry cubic standard foot.

The equivalent pounds per hour and tons per year limits for these facilities are listed below.

Facilities	Stack	Exhaust flow (acfm)	Limit (lb/hr)	Limit (ton/yr)
MX-205	227	1,000	0.26	1.13
RL-110/111, HE-116	117	10,000	2.57	11.26
RL-210/211, HE-216	217	6,000	1.54	6.75
SI-610	612	1,000	0.26	1.13
SI-620	622	1,000	0.26	1.13
SI-630	632	1,000	0.26	1.13
BN-710, LS-712	714	1,000	0.26	1.13
BN-720, LS-722	724	1,000	0.26	1.13
BN-730, LS-732	734	1,000	0.26	1.13
LS-752	754	1,000	0.26	1.13
BN-910, BA-914/SC-911	912	1,000	0.26	1.13
BN-810, BA-811	807	4,000	1.03	4.50

Based on information provided by the manufacturer of the baghouses used at the source, the source is in compliance with 326 IAC 6.5-1-2.

Pursuant to 326 IAC 6.5-1-2(a), the particulate emissions from brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed 0.03 grains per dry cubic standard foot.

326 IAC 6.5-4 (Particulate Emissions Limitations: Dubois County)

The particulate matter limitations listed in 326 IAC 6.5-4 do not apply to this source and its facilities because it is not one of the listed sources in 326 IAC 6.5-4.

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

The insignificant brazing equipment, cutting torches, soldering equipment and welding equipment are subject to a particulate matter limitation established in 326 IAC 6.5-1-2(a). Therefore, pursuant to 326 IAC 6-3-1(c)(3), the requirements of 326 IAC 6-3 do not apply.

326 IAC 6-4 (Fugitive Dust Emissions)

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

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

Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the plan submitted on October 16, 2001. The plan identifies which measures will be taken to mitigate fugitive particulate matter emissions from open aggregate piles, outdoor conveying of aggregate material, transfer of aggregate material, transportation of material, loading and unloading operations, solid waste handling, and material handling operations. The plan is attached to the permit as Appendix A.

326 IAC 8-3-2 (Organic Solvent Degreasing)

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

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

326 IAC 8-3-5 (Organic Solvent Degreasing)

Pursuant to 326 IAC 8-3-1(b), the degreasing operations located at the source are not subject to the requirements of 326 IAC 8-3-5 because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and was constructed before the applicability date of July 1, 1990.

Testing Requirements

The initial performance testing required pursuant to 40 CFR 60 Subpart OOO for facilities LS-752, BA-811, BA-914/SC-911, BN-910, BC-101, BC-102, and CR-410 has been completed and the results were validated by IDEM in letters dated July 21, 2005 and September 8, 2005. Testing indicates that these facilities are in compliance with the limitations in 326 IAC 6.5-1-2 and 40 CFR 60, Subpart OOO.

No additional testing is required for this source because the source will be in compliance with the limitations in 326 IAC 6.5-1-2 and 40 CFR Part 60 Subpart OOO by operating the integral and non-integral baghouses at all times that the respective fireclay processing facilities are in operation.

Compliance Monitoring

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

1. The emission units identified as South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911), 3-Spout Packer unit (BA-811), Belt Conveyor (BC-101), Belt

Conveyor (BC-102), and Tile Crusher (CR-410) have applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the stack exhausts and transfer points shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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 start up or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
 - (b) The Permittee shall record the total static pressure drop across the baghouses controlling the South Storage Bin (BN-730), South Bin Loadout Spout (LS-732), Railroad Loadout Spout (LS-752), Storage Bin (BN-910), Bulk Bagger/Screw Conveyor (BA-914/SC-911) and 3-Spout Packer unit (BA-811) at least once per day when the facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - to Excursions or Exceedances, shall be considered a deviation from this permit.
 - (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
 - (d) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed unit have been repaired or replaced.
 - (e) 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.
 - (f) 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.
2. The emission units identified as MX-205, RL-110/111, RL-210/211, SI-610, SI-620, SI-630, BN-710, BN-720, LS-712, LS-722, HE-116, and HE-216 at all times the mixer is in operation.

- (a) 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.
- (b) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed unit have been repaired or replaced.
- (c) 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.
- (d) 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.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6.5-1 and 40 CFR 60, Subpart OOO.

Conclusion

The operation of this stationary mineral (fire clay) processing facility shall be subject to the conditions of the Minor Source Operating Permit 037-12727-00062.

Appendix A to the TSD: Emission Calculations

PM Emission Calculations

Fire Clay Processing

Company Name: Unimin Corporation - Huntingburg Facility

Address: Huntingburg, IN 47542

MSOP Permit No: M037-12727-00062

Reviewer: ERG/ST

Date: August 15, 2006

Process	Unit	Unit ID	Stack ID	Exhaust Flow Rate (acfm)	Estimated Control Efficiency (%)	Maximum Process Throughput (ton/hr)	PM Emission Factor (lb/ton)	Footnote	Uncontrolled Potential To Emit (ton/yr)	Controlled Potential To Emit (ton/yr)	NSPS Subpart OOO (<0.02 gr/dscf)		326 IAC 6-1-2 (<0.03 gr/dscf)		Potential To Emit for source determination ** (ton/yr)
01 Clay Blends Mixing	Mixer	MX-205	227	1000	99.9	20	0.078	a, **	6.83	0.01	-	-	0.26	1.13	6.83
02 Milling System #1	Mill/Whizzer	RL-110/111	117	10000	99.995	10	1700	b	74460	3.72	-	-	2.57	11.26	3.72
03 Milling System #2	Mill/Whizzer	RL-210/211	217	6000	99.995	18	1700	b	134028	6.70	-	-	1.54	6.76	6.70
04 Clay Storage & Loading	Silo #1	SI-610	612	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	Silo #2	SI-620	622	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	Silo #3	SI-630	632	1000	99.0	18	0.00175	c	13.80	0.14	-	-	0.26	1.13	0.14
	North Bin	BN-710	714	1000	99.0	100	0.00175	c	76.65	0.77	-	-	0.26	1.13	0.77
	North Bin Spout	LS-712			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
	Middle Bin	BN-720	724	1000	99.0	100	0.00175	c	76.65	0.77	-	-	0.26	1.13	0.77
	Middle Bin Spout	LS-722			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
	South Bin	BN-730	732	1000	99.0	100	0.00175	c	76.65	0.77	0.17	0.75	0.26	1.13	0.77
	South Bin Spout	LS-732			99.0	100	0.00175	c	76.65	0.77	-	-			0.77
	RR Loading	LS-752	754	1000	99.0	50	0.00175	c, **	38.33	0.38	0.17	0.75	0.26	1.13	38.33
05 Bagging/Palletizing	Bulk Bag Bin	BN-910	912	1000	99.0	10	0.00175	c	7.66	0.08	0.17	0.75	0.26	1.13	0.08
	Bulk Bag Loading	SC-911/BA-914			99.0	10	0.0045	c	19.71	0.20	-	-	-	-	0.20
	Bagger Bin	BN-810	807	4000	99.0	10	0.00175	c	7.66	0.08	0.69	3.00	1.03	4.50	0.08
Various Fugitive Sources	3 Spout Packer	BA-811			99.0	10	0.0045	c	19.71	0.20	-	-	-	-	0.20
	Belt Conveyor	BC-001	-	-	0.0	100	0.000048	d	0.02	0.02	-	-	-	-	0.02
	Belt Conveyor	BC-002	-	-	0.0	100	0.000048	d	0.02	0.02	-	-	-	-	0.02
	Belt Conveyor	BC-101	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-102	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-201	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-202	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-203	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-204	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Belt Conveyor	BC-401	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-411	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-501	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
	Belt Conveyor	BC-011	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Bin	BN-108	-	-	0.0	10	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Bin	BN-208	-	-	0.0	18	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Shredder	SH-001	-	-	0.0	100	0.0007	d	0.31	0.31	-	-	-	-	0.31
	Crusher	CR-410	-	-	0.0	20	0.0007	d	0.06	0.06	-	-	-	-	0.06
	Hopper	HO-100	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Hopper	HO-200	-	-	0.0	20	0.000048	d	0.00	0.00	-	-	-	-	0.00
	Hopper	HO-400	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12
Hopper	HO-500	-	-	0.0	20	0.0014	d	0.12	0.12	-	-	-	-	0.12	

** Note that all baghouses, except DC-227 and DC-754 (controlling emissions from stacks 227 and 754, respectively), are considered integral.

Total Controlled PTE (ton/yr) = 17.4
 Total Limited PTE (ton/yr) = 30.0
 Total PTE for source permitting status (ton/yr) = 62.2

a- Emission factors from AP-42:Table 11.12-2 (concrete batch mixer loading)

b- Emission factors assume 99% loss as a worst case estimate

c- Emission factors are for controlled operations from AP-42: Table 11.26-1 (Talc processing). Used because

AP-42 factors for fire clay processing do not contain EFs for the respective operations.

d- Emission factors for fugitive sources are from AP-42: Table 11.26-1 (Talc processing). The EF used

is for controlled operations because of the moisture content of the material is high enough to mitigate particulate emissions.

Note that several facilities exhaust to a shared baghouse. Therefore, limited emissions from these facilities are presented together because the applicable NSPS and 326 IAC 6-1-2 limitations are in terms of gr/dscf.

Note that despite what the emission calculations may indicate, the manufacturer of the baghouses guarantees that any facility using the baghouses will be in compliance with 40 CFR Part 60 Subpart OOO.

METHODOLOGY

Uncontrolled Potential Emissions (for Mixing, Milling and fugitive) (ton/yr) = emission factor (lb/ton) x maximum throughput (ton/hr) x 8760 (hr/yr) x 1/2000 (ton/lb)

Uncontrolled Potential Emissions (all other units) (ton/yr) = controlled emissions (ton/yr) / (1 - control efficiency (%)) / 100

Controlled Potential Emissions (for Mixing and Milling) (ton/yr) = Uncontrolled Potential Emissions (ton/yr) x (1 - control efficiency (%)) / 100

Controlled Potential Emissions (all other units) (ton/yr) = controlled emission factor (lb/ton) x maximum throughput (ton/hr) x 8760 (hr/yr) x 1/2000 (ton/lb)

APPENDIX A
UNIMIN CORPORATION – HUNTINGBURG FACILITY
FUGITIVE PARTICULATE MATTER EMISSIONS
CONTROL PLAN

Per 326 IAC 6-5-1(b), the Huntingburg facility is required to prepare a control plan for fugitive particulate matter emissions. The contents of the Control Plan is set down in writing as per 326 IAC 6-5-5(a) and contains the information identified in 326 IAC 6-5-5 (1) through (12). Per 326 IAC 6-5-8, the Control Plan will be updated at the time of reapplication for Huntingburg’s operating permit.

- (1) Source: Unimin Corporation - Huntingburg Clay Processing Facility
P.O. Box 194, 1405 Industrial Park Drive
Huntingburg, IN 47542

- (2) Owner/Operator Responsible for the Execution of the Control Plan: Same as above
Contact: Kevin Heckel, Plant Manager
Tel: 812-683-2179
Fax: 812-683-2195

- (3) Identification of Potential Emission Sources
Fugitive particulate matter emissions are generated from multiple sources at the Huntingburg plant site. Per 326 IAC 6-5-4, the emission sources are identified as the following emission points:
 - (a) Paved roads, unpaved roads, and parking lots;
 - (b) Open aggregate piles;
 - (c) Outdoor conveying of aggregate material;
 - (d) Transfer of aggregate material;
 - (e) Transportation of aggregate material by truck, front end loader, or similar vehicles;
 - (f) Loading and unloading operations of material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles;
 - (g) Solid waste handling;
 - (h) Material handling operations such as crushing, grinding, screening, and mixing;
 - (i) Escape through building openings such as doors, windows, powered or unpowered ventilators, and roof monitors other than a stack.

- (4) Site map
A site map is available at the site.

- (5) Vehicular Activity

Vehicles	Trips/hour	Speed (mph)	Distance (Miles per trip)	Gross/Tare Weights (tons)
Tractor Trailer	<1	10	0.03	40/18
Tandem Truck	<1	10	0.01	35/15
Plant vehicle	<1	10	0.04	0.5/0.5

- (6) Type and Quantity of material handled
Stockpiles consist predominantly of clay mineral products. All material is inert. The material is blended to create bulk and/or bagged products, which depend upon customer specifications. The quantity of material handled is held confidential.

- (7) Equipment used to maintain aggregate piles
Outdoor stockpiles are produced by truck dumping; and removed by front-end loader. Clay trucks are tarped. A clay shredder discharges clay directly into covered storage bays. A tile crusher discharges broken bathroom tile directly into a covered storage bay. Other raw materials are put in place by a front-end loader or truck. A front-end loader removes all material.

- (8) Description of Control Measure
Described below under CONTROL MEASURES.
- (9) Specification of dust suppressant material
Based on the design and configuration of the facility, dust suppressant is not a recommended method of controlling fugitive emission. Unimin has designed and implemented other forms of fugitive particulate matter emission control.
- (10) Specifications of the particulate matter collection equipment
Specifications of the particulate matter collection equipment are identified in the IDEM air permit 039-12727-00062, which may be amended from time to time.
- (11) Schedule of Compliance
A schedule of compliance is not in place, nor required at the Huntingburg facility.
- (12) Recordkeeping
Unimin will maintain records for three years, which document all control measures and activities to be implemented for this control plan. Most of the maintenance records will be maintained on the Qquest electronic database and can be recalled at the request of an inspector.

CONTROL MEASURES

Control measures for fugitive particulate matter emissions generated from the emission points listed in Item 3, are identified below:

- (a) Paved Roads, unpaved roads, and parking lots
The plant is located at the end of a paved city-owned road. The plant does not maintain the city road. There is less than one tenth of an acre of unpaved driveway for loading bagged product onto tractor-trailers. The parking area is an insignificant source of fugitive emission. A concrete pad, approximately three tenths of an acre in size, is located below the outdoor process equipment. Fugitive emissions are minimized by controlling emissions on the process equipment (i.e. covered conveyance, baghouses) and by applying good housekeeping practices.
- (b) Open aggregate piles
Open stockpiles are located on two sides of the plant. To mitigate stockpile emissions, Unimin has implemented a number of strategies including:
 - (1) Minimizing stockpile size – Stockpiles formerly covering 6 acres has been reduced to almost half that size. Former stockpile areas have been graded, covered with topsoil and re-vegetated. Maintaining smaller stockpiles will continue as part of operational practices to reduce on-site inventories.
 - (2) Placing stockpiles under cover – A number of storage bays have been created under stationary cover to store raw materials away from the wind and rain.
 - (3) Tarping and vegetating stockpiles – Unimin has on occasion used tarps and vegetated piles to reduce wind erosion and will implement these measures on a case-by-case basis.
- (c) Outdoor conveying of aggregate material
Unimin minimizes fugitive emissions from process equipment by covering conveyor belts.
- (d) Transfer of aggregate material
Emissions are generated when aggregate material is transferred from the shredder to a stockpile. Fugitive emissions are reduced by operating in unexposed locations. The shredder is operated under cover and discharges into a storage bay. When possible, the equipment use will be

restricted in exceptionally windy conditions.

- (e) **Transportation by truck, front end loader or train**
Trucks, which haul clay to the facility, use tarps for emission control. A front-end loader is used to transfer raw materials into open hoppers. Fugitive emissions have been minimized by locating the two batch hoppers in an unexposed area adjacent to the process building. Transport distances on-site are short (< 600 feet), however when possible, the truck loading (from rail cars) and truck unloading will be restricted in exceptionally windy conditions.
- (f) **Loading and unloading operations of material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles**
Raw material loading/unloading operations have been discussed elsewhere in this Control Plan. Product is loaded into silos for transfer to truck and railcars. Emissions from the loadout spouts are controlled by the silo baghouses. Pre-1999, the greatest source of fugitive emissions was caused by silo over-filling. Unimin installed "high level indicators" in all silos, which triggers a warning light to inform the operator, who then shuts down the fill lines. This tool has worked very effectively.
- (g) **Solid Waste Handling**
Office and plant waste is placed in designated waste bins and hauled off-site by disposal contractors. Mineral waste is recycled into the plant process wherever feasible. A Plant Waste Disposal Policy/Procedure was generated in 2000 for proper management of plant wastes.
- (h) **Material handling operations such as crushing, grinding, screening, and mixing**
Grinding and screening do not occur at the Huntingburg plant. Milling and mixing operations are vented to fabric filters. A stationary tile crusher is located outdoors. Bathroom wall tile is crushed and discharged into a covered storage bay for use as a raw material.
- (i) **Escape through building opening such as doors, windows, powered or unpowered ventilators, roof monitors, other than a stack**
Unimin follows an equipment maintenance program (Qqest) to ensure proper maintenance of the process equipment and particulate collection system. Unimin obtained written approval from Craig Lawson (IDEM Office of Water Management, Pre-Treatment & Urban Wet Weather Section) to use a floor sweeper to wash the floors to minimize fugitive emissions within the plant and warehouse. In so far as sources of fugitive emissions can also be sources of stormwater pollutants, Unimin has generated and implemented a Stormwater Pollution Prevention Plan (SWPPP) to reduce and mitigate potential sources of pollutants.