INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: November 28, 2007

RE: Barrett's Minerals, Inc. / 129-22660-00023

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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(800) 451-6027
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Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

Barretts Minerals Inc.
2700 Bluff Road
Mt. Vernon, Indiana 47620

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

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 an MSOP under 326 IAC 2-6.1.

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

Operation Permit No.: MSOP 129-22660-00023	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 28, 2007 Expiration Date: November 28, 2012

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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 talc, barite and calcium carbonate processing source.

Source Address:	2700 Bluff Road, Mt. Vernon, Indiana 47620
Mailing Address:	2700 Bluff Road, Mt. Vernon, Indiana 47620
General Source Phone Number:	812- 838-8330
SIC Code:	3295
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) grinding plant, installed in 1991, exhausted to Stacks A through K and M controlled by twelve (12) baghouses, identified as A through K and M, capacity: 14.0 tons of talc, barite or calcium carbonate per hour, consisting of the following:

(1) One (1) electric crusher system, manufactured on September 14, 1960, capacity 50.0 tons of ore per hour.

(2) Two (2) silos, identified as North and South, connected pneumatically to baghouses, identified as B and C, exhausted to Stacks B and C, throughput capacity: 35.0 tons of ore per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(3) One (1) roller mill, manufactured in November 1928, connected pneumatically to a baghouse, identified as D, exhausted to Stack D, throughput capacity: 14.0 tons of nonmetallic minerals per hour.

(4) One (1) classifier #1, connected pneumatically to a baghouse, identified as E, exhausted to Stack E, throughput capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(5) Six (6) silos, identified as Red, Green, Blue, Yellow, Pink and Orange, connected pneumatically to baghouses, identified as F, G, H, I, J and K, exhausted to Stacks F, G, H, I, J and K, respectively, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(6) One (1) impact mill, manufactured on September 10, 1962, connected pneumatically to a baghouse, identified as M, exhausted to Stack M, throughput capacity: 9.0 tons of nonmetallic minerals per hour.

(b) Four (4) silos, identified as Silo #1, Silo #2, Silo #3 and Silo #4, installed in 1994, connected pneumatically to baghouses, identified as N, O, P and Q, exhausted to Stacks N, O, P and Q, respectively, capacity: 8,313 cubic feet, each, and throughput capacity: 14.0 tons of minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(c) Two (2) silos, identified as Silo #5 and Silo #6, installed in 1994, connected pneumatically to baghouses, identified as R and S, exhausted to Stacks R and S, capacity: 6,107 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(d) Five (5) silos, identified as Silo #7, Silo #8, Silo #9, Silo #10 and Silo #11, installed in 1994, connected pneumatically to baghouses, identified as T, U, V, W and X, exhausted to Stacks T, U, V, W and X, respectively, capacity: 11,083 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(e) One (1) hammer mill micronizer, identified as #1 Bepex, manufactured on December 10, 1974, installed in 1994, connected pneumatically to a baghouse, identified as Y, exhausted to Stack Y, capacity: 1.00 ton of nonmetallic minerals per hour.

(f) One (1) ball mill micronizer, identified as Ball Mill, manufactured on January 25, 1950, connected pneumatically to a baghouse, identified as Z, exhausted to Stack Z, capacity: 7.5 tons of non metallic minerals per hour, two (2) silos, identified as Silo #12 connected pneumatically to a baghouse, identified as AA, throughput capacity: 14.0 tons of nonmetallic minerals per hour, and Silo #13, connected pneumatically to a baghouse, identified as AB, throughput capacity: 35.0 tons of ore per hour, exhausted to Stacks AA and AB, capacity: 6,688 cubic feet, each and one (1) classifier #3, installed in 1994, connected pneumatically to a baghouse, identified as AC, exhausted to Stack AC, capacity: 10.0 tons of minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, Silo #12 and #13 are storage bins and are affected facilities and the classifier #3 is a screening operation and is an affected facility.

(g) One (1) pellet mill and natural gas-fired dryer, identified as Pellet Mill, installed in 1996, connected pneumatically to a baghouse, identified as AY, installed in 2006, exhausted to Stack AY, capacity: 8.0 tons of nonmetallic minerals per hour and rated at 6.0 million British thermal units per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility. Under NSPS, 40 CFR Part 60.730, Subpart UUU, the dryer is an affected facility.

(h) Five (5) material storage silos, identified as Silo A, Silo B, Silo C, Silo D and Silo #14, exhausted to Stacks AG, AH, AI, AJ and AK, respectively, connected pneumatically to baghouses, identified as AG, AH, AI, AJ and AK, respectively, installed in 1997, capacity: 12,038 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Silos A, B, C and D are also connected pneumatically to a common baghouse, identified as AM for unloading/transfer purposes, throughput capacity: 14.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(i) One (1) Bepex/Air Mill Room, capacity: 2.0 tons of nonmetallic minerals per hour, consisting of:

(1) Three (3) silos, identified as Silo #15, Silo #16 and Silo #17, connected pneumatically to baghouses, identified as AO, AS and AT, exhausted to Stacks AO, AS and AT, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) single air mill (powder), connected pneumatically to a baghouse, identified as AP, exhausted to Stack AP, throughput capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(j) One (1) twin air mill, connected pneumatically to a baghouse, identified as AU, exhausted to Stack AU, installed in 2004, capacity: 2.0 tons of talc per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(k) One (1) air jet milling system, installed in 2005, capacity of 2.5 tons of nonmetallic minerals per hour, consisting of:

(1) Two (2) silos, identified as Silo #18 and Silo #19, connected pneumatically to baghouses, identified as AV, and AW, exhausted to Stacks AV and AW, capacity; 3,950 cubic feet, each and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) #3 air mill, connected pneumatically to a baghouse, identified as AX, exhausted to Stack AX, capacity 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(l) One (1) classifier #2, connected pneumatically to a baghouse, identified as BA installed in 1995, exhausted to Stack BA, capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(m) One (1) Pellet Mill Transfer, connected pneumatically to a baghouse, identified as BB, installed in 1999, exhausted to Stack BB, capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(n) One (1) product recycling bin, connected pneumatically to a baghouse, identified as BC, installed in 2001, exhausted to Stack BC, capacity: 5.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(o) One (1) R1 bin, connected pneumatically to a baghouse, identified as BD, installed in 1994, exhausted to Stack BD, capacity: 25.0 tons of ore per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(p) One (1) auto packaging machine operation, connected pneumatically to a baghouse, identified as BF, installed in 2002, exhausted to Stack BF, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a bagging operation and is an affected facility.

(q) One (1) cosmetic circuit receiver, connected pneumatically to a baghouse, identified as BG, installed in 1992, exhausted to Stack BG, capacity: 7.0 tons of nonmetallic minerals per hour.

Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(r) One (1) bulk truck loadout operation, connected pneumatically to a baghouse, identified as BH, installed in 1996, exhausted to Stack BH, capacity: 16.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

(s) One (1) bulk railcar loadout operation, connected pneumatically to a baghouse, identified as BI, installed in 1997, exhausted to Stack BI, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

SECTION B GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

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

(a) This permit, MSOP 129-22660-00023, 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(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
MC 61-53 IGCN 1003
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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP require-

ments 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 MSOP 129-22660-00023 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

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

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

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

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [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 the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

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

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

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

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

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

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

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

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

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

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

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

C.7 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 on September 24, 2007. The plan requires that all dump trucks shall be tarped when transporting raw ore material into the source and that water shall be applied to outside storage piles on an as-needed basis.

C.8 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.

C.9 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 two hundred sixty (260) linear feet on pipes or one hundred sixty (160) square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project

supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least seventy-five hundredths (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.10 Performance Testing [326 IAC 3-6]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 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 commis-

sioner or the U.S. EPA.

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

C.12 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.13 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.14 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.15 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.16 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.17 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.18 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.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Entire Source

(a) One (1) grinding plant, installed in 1991, exhausted to Stacks A through K and M controlled by twelve (12) baghouses, identified as A through K and M, capacity: 14.0 tons of talc, barite or calcium carbonate per hour, consisting of the following:

(1) One (1) electric crusher system, manufactured on September 14, 1960, capacity 50.0 tons of ore per hour.

(2) Two (2) silos, identified as North and South, connected pneumatically to baghouses, identified as B and C, exhausted to Stacks B and C, throughput capacity: 35.0 tons of ore per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(3) One (1) roller mill, manufactured in November 1928, connected pneumatically to a baghouse, identified as D, exhausted to Stack D, throughput capacity: 14.0 tons of nonmetallic minerals per hour.

(4) One (1) classifier #1, connected pneumatically to a baghouse, identified as E, exhausted to Stack E, throughput capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(5) Six (6) silos, identified as Red, Green, Blue, Yellow, Pink and Orange, connected pneumatically to baghouses, identified as F, G, H, I, J and K, exhausted to Stacks F, G, H, I, J and K, respectively, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(6) One (1) impact mill, manufactured on September 10, 1962, connected pneumatically to a baghouse, identified as M, exhausted to Stack M, throughput capacity: 9.0 tons of nonmetallic minerals per hour.

(b) Four (4) silos, identified as Silo #1, Silo #2, Silo #3 and Silo #4, installed in 1994, connected pneumatically to baghouses, identified as N, O, P and Q, exhausted to Stacks N, O, P and Q, respectively, capacity: 8,313 cubic feet, each, and throughput capacity: 14.0 tons of minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(c) Two (2) silos, identified as Silo #5 and Silo #6, installed in 1994, connected pneumatically to baghouses, identified as R and S, exhausted to Stacks R and S, capacity: 6,107 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(d) Five (5) silos, identified as Silo #7, Silo #8, Silo #9, Silo #10 and Silo #11, installed in 1994, connected pneumatically to baghouses, identified as T, U, V, W and X, exhausted to Stacks T, U, V, W and X, respectively, capacity: 11,083 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(e) One (1) hammer mill micronizer, identified as #1 Bepex, manufactured on December 10, 1974, installed in 1994, connected pneumatically to a baghouse, identified as Y, exhausted to Stack Y, capacity: 1.00 ton of nonmetallic minerals per hour.

Emissions Unit Description: (continued)

(f) One (1) ball mill micronizer, identified as Ball Mill, manufactured on January 25, 1950, connected pneumatically to a baghouse, identified as Z, exhausted to Stack Z, capacity: 7.5 tons of non metallic minerals per hour, two (2) silos, identified as Silo #12 connected pneumatically to a baghouse, identified as AA, throughput capacity: 14.0 tons of nonmetallic minerals per hour, and Silo #13, connected pneumatically to a baghouse, identified as AB, throughput capacity: 35.0 tons of ore per hour, exhausted to Stacks AA and AB, capacity: 6,688 cubic feet, each and one (1) classifier #3, installed in 1994, connected pneumatically to a baghouse, identified as AC, exhausted to Stack AC, capacity: 10.0 tons of minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, Silo #12 and #13 are storage bins and are affected facilities and the classifier #3 is a screening operation and is an affected facility.

(g) One (1) pellet mill and natural gas-fired dryer, identified as Pellet Mill, installed in 1996, connected pneumatically to a baghouse, identified as AY, installed in 2006, exhausted to Stack AY, capacity: 8.0 tons of nonmetallic minerals per hour and rated at 6.0 million British thermal units per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility. Under NSPS, 40 CFR Part 60.730, Subpart UUU, the dryer is an affected facility.

(h) Five (5) material storage silos, identified as Silo A, Silo B, Silo C, Silo D and Silo #14, exhausted to Stacks AG, AH, AI, AJ and AK, respectively, connected pneumatically to baghouses, identified as AG, AH, AI, AJ and AK, respectively, installed in 1997, capacity: 12,038 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Silos A, B, C and D are also connected pneumatically to a common baghouse, identified as AM for unloading/transfer purposes, throughput capacity: 14.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(i) One (1) Bepex/Air Mill Room, capacity: 2.0 tons of nonmetallic minerals per hour, consisting of:

(1) Three (3) silos, identified as Silo #15, Silo #16 and Silo #17, connected pneumatically to baghouses, identified as AO, AS and AT, exhausted to Stacks AO, AS and AT, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) single air mill (powder), connected pneumatically to a baghouse, identified as AP, exhausted to Stack AP, throughput capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(j) One (1) twin air mill, connected pneumatically to a baghouse, identified as AU, exhausted to Stack AU, installed in 2004, capacity: 2.0 tons of talc per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(k) One (1) air jet milling system, installed in 2005, capacity of 2.5 tons of nonmetallic minerals per hour, consisting of:

(1) Two (2) silos, identified as Silo #18 and Silo #19, connected pneumatically to baghouses, identified as AV, and AW, exhausted to Stacks AV and AW, capacity; 3,950 cubic feet, each and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) #3 air mill, connected pneumatically to a baghouse, identified as AX, exhausted to Stack AX, capacity 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

Emissions Unit Description: (continued)

(l) One (1) classifier #2, connected pneumatically to a baghouse, identified as BA installed in 1995, exhausted to Stack BA, capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(m) One (1) Pellet Mill Transfer, connected pneumatically to a baghouse, identified as BB, installed in 1999, exhausted to Stack BB, capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(n) One (1) product recycling bin, connected pneumatically to a baghouse, identified as BC, installed in 2001, exhausted to Stack BC, capacity: 5.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(o) One (1) R1 bin, connected pneumatically to a baghouse, identified as BD, installed in 1994, exhausted to Stack BD, capacity: 25.0 tons of ore per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(p) One (1) auto packaging machine operation, connected pneumatically to a baghouse, identified as BF, installed in 2002, exhausted to Stack BF, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a bagging operation and is an affected facility.

(q) One (1) cosmetic circuit receiver, connected pneumatically to a baghouse, identified as BG, installed in 1992, exhausted to Stack BG, capacity: 7.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(r) One (1) bulk truck loadout operation, connected pneumatically to a baghouse, identified as BH, installed in 1996, exhausted to Stack BH, capacity: 16.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

(s) One (1) bulk railcar loadout operation, connected pneumatically to a baghouse, identified as BI, installed in 1997, exhausted to Stack BI, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

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

Emission Limitations and Standards

D.1.1 PSD PM Minor Limits [326 IAC 2-2]

Particulate matter (PM) from facilities listed in the following table shall not exceed the pound per hour emission rates:

Facility Description	Baghouse Identification	Limited PM Emission Rate (lbs/hr)
Crusher System		2.53
North Silo	B	0.262
South Silo	C	0.262
Roller Mill	D	7.35
Classifier #1	E	0.235
Red Silo	F	0.227
Green Silo	G	0.227
Blue Silo	H	0.227
Yellow Silo	I	0.303
Pink Silo	J	0.303
Orange Silo	K	0.349
Impact Mill	M	7.35
#1 Silo	N	0.136
#2 Silo	O	0.136
#3 Silo	P	0.136
#4 Silo	Q	0.136
#5 Silo	R	0.227
#6 Silo	S	0.227
#7 Silo	T	0.227
#8 Silo	U	0.227
#9 Silo	V	0.227
#10 Silo	W	0.227
#11 Silo	X	0.227
#1 Bepex	Y	3.30
Ball Mill	Z	9.43
#12 Silo	AA	0.146
#13 Silo	AB	0.146
Classifier #3	AC	0.224
Silo A	AG	0.103
Silo B	AH	0.235
Silo C	AI	0.103
Silo D	AJ	0.103
Silo #14	AK	0.227
Common Baghouse	AM	0.103
Silo #15	AO	0.262
Single Air Mill (powder)	AP	0.560
Silo #16	AS	0.174
Silo #17	AT	0.174
Twin Air Mill	AU	0.776
Silo #18	AV	0.212
Silo #19	AW	0.212
#3 Air Mill	AX	0.371
Pellet Mill & Nat. Gas Dryer	AY	3.04
Classifier #2	BA	0.270
Pellet Mill Transfer	BB	0.119
Product Recycling Bin	BC	0.523
R1 Bin	BD	0.270
Auto Packaging Machine Op.	BF	0.523
Cosmetic Circuit Receiver	BG	0.274
Bulk Truck Loadout	BH	0.262
Bulk Railcar Loadout	BI	0.262

Compliance with these PM limits and potential PM emissions from other emission units at this source shall limit PM emissions to less than two hundred fifty (250) tons per year and renders the entire source minor with respect to 326 IAC 2-2 (PSD).

D.1.2 Particulate [326 IAC 6-3-2]

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

(a) crusher system shall not exceed 44.5 pounds per hour when operating at a process weight rate of 50.0 tons per hour,

(b) roller mill shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14.0 tons per hour,

(c) impact mill shall not exceed 17.8 pounds per hour when operating at a process weight rate of 9.0 tons per hour,

(d) #1 Bepex shall not exceed 4.1 pounds per hour when operating at a process weight rate of 1.0 ton per hour, and

(e) ball mill shall not exceed 15.8 pounds per hour when operating at a process weight rate of 7.5 tons per hour.

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

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

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

and

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

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

D.1.3 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 all facilities, except the crusher system, and their baghouse control devices.

Compliance Determination Requirements

D.1.4 Particulate Control

(a) In order to comply with Conditions D.1.1 and D.1.2, the baghouses, identified as B through Z, AA through AC, AG through AM, AO and AP, AS through AY, BA through BD and BF through BI for particulate control shall be in operation and control emissions from the talc, barite and calcium carbonate processing facilities 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.

D.1.5 Testing Requirements [326 IAC 2-1.1-11]

(a) Within one hundred eighty (180) days of issuance of this MSOP Renewal, 129-22660-00023, in order to demonstrate compliance with Condition E.1.2, the Permittee shall perform PM testing of the following facilities:

(1) classifier #1, connected pneumatically to a baghouse, identified as E, exhausted to Stack E,

(2) one (1) of the six (6) silos, identified as Red, Green, Blue, Yellow, Pink and Orange, connected pneumatically to baghouses, identified as F, G, H, I, J and K, exhausted to Stacks F, G, H, I, J and K, respectively,

(3) one (1) of the three (3) silos, identified as Silo #15, Silo #16 and Silo #17, connected pneumatically to baghouses, identified as AO, AS and AT, exhausted to Stacks AO, AS and AT,

(4) classifier #2, connected pneumatically to a baghouse, identified as BA installed in 1995, exhausted to Stack BA,

(5) Pellet Mill Transfer, connected pneumatically to a baghouse, identified as BB, exhausted to Stack BB,

(6) product recycling bin, connected pneumatically to a baghouse, identified as BC, exhausted to Stack BC,

(7) R1 bin, connected pneumatically to a baghouse, identified as BD, exhausted to Stack BD,

(8) auto packaging machine operation, connected pneumatically to a baghouse, identified as BF, exhausted to Stack BF,

(9) cosmetic circuit receiver, connected pneumatically to a baghouse, identified as BG, exhausted to Stack BG,

(10) bulk truck loadout operation, connected pneumatically to a baghouse, identified as BH, exhausted to Stack BH,

(11) bulk railcar loadout operation, connected pneumatically to a baghouse, identified as BI, exhausted to Stack BI,

utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) By April 23, 2008 in order to demonstrate compliance with Condition E.1.2, the Permittee shall perform PM and opacity testing of one (1) of the two (2) silos, identified as North and South, connected pneumatically to baghouses, identified as B and C, exhausted to Stacks B and C, the utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) By April 23, 2008 in order to demonstrate compliance with Condition E.1.2, the Permittee shall perform PM and opacity testing of one (1) of the eleven (11) silos, identified as Silos #1 through #11, connected pneumatically to baghouses, identified as N through X, exhausted to Stacks N through X, respectively, the utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(d) By April 23, 2008 in order to demonstrate compliance with Conditions E.1.2 and E.2.2, the Permittee shall perform PM and opacity testing of the pellet mill and natural gas-fired dryer, identified as Pellet Mill, connected pneumatically to a baghouse, identified as AY, exhausted to Stack AY, the utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(e) By May 15, 2010 in order to demonstrate compliance with Condition E.1.2, the Permittee shall perform PM and opacity testing of the classifier #3, connected pneumatically to a baghouse, identified as AC, exhausted to Stack AC, the utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(f) By March 2, 2011 in order to demonstrate compliance with Condition E.1.2, the Permittee shall perform PM and opacity testing of either the single air mill (powder), connected pneumatically to a baghouse, identified as AP, exhausted to Stack AP, or the #3 air mill, connected pneumatically to a baghouse, identified as AX, exhausted to Stack AX,, the utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the talc, barite and calcium carbonate processing stack exhausts, identified as B through Z, AA through AC, AG through AM, AO and AP, AS through AY, BA through BD and BF through BI, shall be performed once per day during normal day-light operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.7 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouses, identified as B through Z, AA through AC, AG through AM, AY, BA through BD and BF through BI, used in conjunction with the talc, barite and calcium carbonate processing facilities at least once per day when these 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 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall record the pressure drop across the baghouses, identified as AO, AP and AS through AX, used in conjunction with the talc, barite and calcium carbonate processing facilities at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the 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, or leaks.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain a daily record of visible emission notations of the talc, barite and calcium carbonate processing baghouse stack exhausts, identified as B through Z, AA through AC, AG through AM, AO and AP, AS through AY, BA through BD and BF through BI. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the roller miller exhausted to Stack D did not operate that day).

(b) To document compliance with Condition D.1.7, the Permittee shall maintain a daily record of the pressure drop across the baghouses, identified as B through Z, AA through AC, AG through AM, AO and AP, AS through AY, BA through BD and BF through BI, controlling talc, barite and calcium carbonate processing facilities. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure

drop reading, (e.g., the roller miller did not operate that day).

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart OOO for:

(a) One (1) grinding plant, installed in 1991, exhausted to Stacks A through K and M controlled by twelve (12) baghouses, identified as A through K and M, capacity: 14.0 tons of talc, barite or calcium carbonate per hour, consisting of the following:

(2) Two (2) silos, identified as North and South, connected pneumatically to baghouses, identified as B and C, exhausted to Stacks B and C, throughput capacity: 35.0 tons of ore per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(4) One (1) classifier #1, connected pneumatically to a baghouse, identified as E, exhausted to Stack E, throughput capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(5) Six (6) silos, identified as Red, Green, Blue, Yellow, Pink and Orange, connected pneumatically to baghouses, identified as F, G, H, I, J and K, exhausted to Stacks F, G, H, I, J and K, respectively, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(b) Four (4) silos, identified as Silo #1, Silo #2, Silo #3 and Silo #4, installed in 1994, connected pneumatically to baghouses, identified as N, O, P and Q, exhausted to Stacks N, O, P and Q, respectively, capacity: 8,313 cubic feet, each, and throughput capacity: 14.0 tons of minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(c) Two (2) silos, identified as Silo #5 and Silo #6, installed in 1994, connected pneumatically to baghouses, identified as R and S, exhausted to Stacks R and S, capacity: 6,107 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(d) Five (5) silos, identified as Silo #7, Silo #8, Silo #9, Silo #10 and Silo #11, installed in 1994, connected pneumatically to baghouses, identified as T, U, V, W and X, exhausted to Stacks T, U, V, W and X, respectively, capacity: 11,083 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(e) One (1) hammer mill micronizer, identified as #1 Bepex, manufactured on December 10, 1974, installed in 1994, connected pneumatically to a baghouse, identified as Y, exhausted to Stack Y, capacity: 1.00 ton of nonmetallic minerals per hour.

(f) One (1) ball mill micronizer, identified as Ball Mill, manufactured on January 25, 1950, connected pneumatically to a baghouse, identified as Z, exhausted to Stack Z, capacity: 7.5 tons of non metallic minerals per hour, two (2) silos, identified as Silo #12 connected pneumatically to a baghouse, identified as AA, throughput capacity: 14.0 tons of nonmetallic minerals per hour, and Silo #13, connected pneumatically to a baghouse, identified as AB, throughput capacity: 35.0 tons of ore per hour, exhausted to Stacks AA and AB, capacity: 6,688 cubic feet, each and one (1) classifier #3, installed in 1994, connected pneumatically to a baghouse, identified as AC, exhausted to Stack AC, capacity: 10.0 tons of minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, Silo #12 and #13 are storage bins and are affected facilities and the classifier #3 is a screening operation and is an affected facility.

Emissions Unit Description: NSPS Subpart OOO for: (continued)

(g) One (1) pellet mill and natural gas-fired dryer, identified as Pellet Mill, installed in 1996, connected pneumatically to a baghouse, identified as AY, installed in 2006, exhausted to Stack AY, capacity: 8.0 tons of nonmetallic minerals per hour and rated at 6.0 million British thermal units per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility. Under NSPS, 40 CFR Part 60.730, Subpart UUU, the dryer is an affected facility.

(h) Five (5) material storage silos, identified as Silo A, Silo B, Silo C, Silo D and Silo #14, exhausted to Stacks AG, AH, AI, AJ and AK, respectively, connected pneumatically to baghouses, identified as AG, AH, AI, AJ and AK, respectively, installed in 1997, capacity: 12,038 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Silos A, B, C and D are also connected pneumatically to a common baghouse, identified as AM for unloading/transfer purposes, throughput capacity: 14.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(i) One (1) Bepex/Air Mill Room, capacity: 2.0 tons of nonmetallic minerals per hour, consisting of:

(1) Three (3) silos, identified as Silo #15, Silo #16 and Silo #17, connected pneumatically to baghouses, identified as AO, AS and AT, exhausted to Stacks AO, AS and AT, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) single air mill (powder), connected pneumatically to a baghouse, identified as AP, exhausted to Stack AP, throughput capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(j) One (1) twin air mill, connected pneumatically to a baghouse, identified as AU, exhausted to Stack AU, installed in 2004, capacity: 2.0 tons of talc per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(k) One (1) air jet milling system, installed in 2005, capacity of 2.5 tons of nonmetallic minerals per hour, consisting of:

(1) Two (2) silos, identified as Silo #18 and Silo #19, connected pneumatically to baghouses, identified as AV, and AW, exhausted to Stacks AV and AW, capacity; 3,950 cubic feet, each and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) #3 air mill, connected pneumatically to a baghouse, identified as AX, exhausted to Stack AX, capacity 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(l) One (1) classifier #2, connected pneumatically to a baghouse, identified as BA installed in 1995, exhausted to Stack BA, capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(m) One (1) Pellet Mill Transfer, pneumatically connected to a baghouse, identified as BB, installed in 1999, exhausted to Stack BB, capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

Emissions Unit Description: NSPS Subpart OOO for: (continued)

(n) One (1) product recycling bin, connected pneumatically to a baghouse, identified as BC, installed in 2001, exhausted to Stack BC, capacity: 5.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(o) One (1) R1 bin, connected pneumatically to a baghouse, identified as BD, installed in 1994, exhausted to Stack BD, capacity: 25.0 tons of ore per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(p) One (1) auto packaging machine operation, connected pneumatically to a baghouse, identified as BF, installed in 2002, exhausted to Stack BF, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a bagging operation and is an affected facility.

(q) One (1) cosmetic circuit receiver, connected pneumatically to a baghouse, identified as BG, installed in 1992, exhausted to Stack BG, capacity: 7.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(r) One (1) bulk truck loadout operation, connected pneumatically to a baghouse, identified as BH, installed in 1996, exhausted to Stack BH, capacity: 16.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

(s) One (1) bulk railcar loadout operation, connected pneumatically to a baghouse, identified as BI, installed in 1997, exhausted to Stack BI, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-6

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

Pursuant to 40 CFR 60.670, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12 for the talc, barite and calcium carbonate processing source, as specified in Table 1 of 40 CFR Part 60, Subpart OOO in accordance with schedule in 40 CFR 60 Subpart OOO.

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

Pursuant to CFR Part 60, Subpart OOO, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart OOO, which are incorporated by reference as 326 IAC 12 for the facilities listed in Section E.1 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.

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

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

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

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

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

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, 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.

Table 1_Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to Subpart OOO	Comment
60.1, Applicability.....	Yes.....	
60.2, Definitions.....	Yes.....	
60.3, Units and abbreviations.....	Yes.....	
60.4, Address:		
(a).....	Yes.....	
(b).....	Yes.....	
60.5, Determination of construction or modification.	Yes.....	

60.6, Review of plans.....	Yes.....	
60.7, Notification and recordkeeping..	Yes.....	Except in (a)(2) report of anticipated date of initial startup is not required (§ 60.676(h)).
60.8, Performance tests.....	Yes.....	Except in (d), after 30 days notice for an initially scheduled performance test, any rescheduled performance test requires 7 days notice, not 30 days (§ 60.675(g)).
60.9, Availability of information.....	Yes.....	
60.10, State authority.....	Yes.....	
60.11, Compliance with standards and	Yes.....	Except in (b) under certain conditions maintenance requirements. (§§ 60.675 (c)(3) and (c)(4)), Method 9 observation may be reduced from 3 hours to 1 hour. Some affected facilities exempted from Method 9 tests (§ 60.675(h)).
60.12, Circumvention.....	Yes.....	
60.13, Monitoring requirements.....	Yes.....	
60.14, Modification.....	Yes.....	
60.15, Reconstruction.....	Yes.....	
60.16, Priority list.....	Yes.....	
60.17, Incorporations by reference....	Yes.....	
60.18, General control device.....	No.....	Flares will not be used to comply with the emission limits.
60.19, General notification and reporting requirements.	Yes.....	

[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.

(c) 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 crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

(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.

[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.

(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) 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 15 percent opacity; and

(ii) There are no more than 3 readings of 15 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.

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

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

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

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

(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.

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

§ 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.

(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.

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989; 62 FR 31360, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart UUU for:

(g) One (1) pellet mill and natural gas-fired dryer, identified as Pellet Mill, installed in 1996, pneumatically connected to a baghouse, identified as AY, installed in 2006, exhausted to Stack AY, capacity: 8.0 tons of nonmetallic minerals per hour and rated at 6.0 million British thermal units per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility. Under NSPS, 40 CFR Part 60.730, Subpart UUU, the dryer is an affected facility.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-6

E.2.1 General Provisions Relating to NSPS Subpart OOO [326 IAC 12] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.736, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12 for the natural gas-fired dryer, as specified in 40 CFR Part 60, Subpart UUU in accordance with schedule in 40 CFR 60 Subpart UUU.

E.2.2 NSPS Subpart UUU Requirements [40 CFR Part 60, Subpart UUU] [326 IAC 12]

Pursuant to CFR Part 60, Subpart UUU, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart UUU, which are incorporated by reference as 326 IAC 12 for the natural gas-fired dryer, identified as part of the Pellet Mill as specified as follows.

Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries

Source: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

§ 60.730 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.

(b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, “Mineral processing plant”).

(c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

§ 60.731 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities.

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Installed in series means a calciner and dryer installed such that the exhaust gases from one flow through the other and then the combined exhaust gases are discharged to the atmosphere.

Mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

§ 60.732 Standards for particulate matter.

Each owner or operator of any affected facility that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by §60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility that:

(a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and

(b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.

[57 FR 44503, Sept. 28, 1992, as amended at 65 FR 61778, Oct. 17, 2000]

§ 60.733 Reconstruction.

The cost of replacement of equipment subject to high temperatures and abrasion 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. Calciner and dryer equipment subject to high temperatures and abrasion are: end seals, flights, and refractory lining.

§ 60.734 Monitoring of emissions and operations.

(a) With the exception of the process units described in paragraphs (b), (c), and (d) of this section, the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

(c) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.

§ 60.735 Recordkeeping and reporting requirements.

(a) Records of the measurements required in §60.734 of this subpart shall be retained for at least 2 years.

(c) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:

(1) All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent; or

(d) 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 Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[57 FR 44503, Sept. 28, 1992, as amended at 58 FR 40591, July 29, 1993]

§ 60.736 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use 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).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.732 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.

§ 60.737 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: No restrictions.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

MINOR SOURCE OPERATING PERMIT
CERTIFICATION

Source Name: Barretts Minerals Inc.
Source Address: 2700 Bluff Road, Mt. Vernon, Indiana 47620
Mailing Address: 2700 Bluff Road, Mt. Vernon, Indiana 47620
Permit No.: MSOP 129-22660-00023

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify) _____

☐ Notification (specify) _____

☐ Affidavit (specify) _____

☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

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).

Source Name:	**Barretts Minerals Inc.**
Address:	**2700 Bluff Road**
City:	**Mt. Vernon, Indiana 47620**
Phone #:	**812- 838-8330**
MSOP #:	**129-22660-00023**

I hereby certify that Barretts Minerals Inc. is

☐ still in operation.
☐ no longer in operation.

I hereby certify that Barretts Minerals Inc. is

☐ in compliance with the requirements of MSOP 129-22660-00023.
☐ not in compliance with the requirements of MSOP 129-22660-00023.

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

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

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

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

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**Barretts Minerals Inc.**
Source Location:	**2700 Bluff Road, Mt. Vernon, Indiana 47620**
County:	**Posey**
SIC Code:	**3295**
Permit Renewal No.:	**MSOP 129-22660-00023**
Permit Reviewer:	**Mark L. Kramer/MES**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Barretts Minerals Inc. (formerly Polar Minerals) relating to the operation of a stationary talc, barite and calcium carbonate processing source.

History

On February 13, 2006, Barretts Minerals Inc. submitted an application to the OAQ requesting to renew its operating permit. Barretts Minerals Inc. (formerly Polar Minerals) was issued a Minor Source Operating Permit (MSOP) on May 14, 2001. Application 129-23422-00023, received July 26, 2006 was partially incorporated into Notice Only Change 129-23559-00023, issued on October 26, 2006 and the remainder of this application is incorporated in this renewal. Barretts Minerals has stated that there have not been any physical changes to the equipment since the original MSOP was issued. The changes in any capacities reflect a more accurate account of the maximum throughputs.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) grinding plant, installed in 1991, exhausted to Stacks A through K and M controlled by twelve (12) baghouses, identified as A through K and M, capacity: 14.0 tons of talc, barite or calcium carbonate per hour, consisting of the following:

(1) One (1) electric crusher system, manufactured on September 14, 1960, capacity 50.0 tons of ore per hour.

(2) Two (2) silos, identified as North and South, connected pneumatically to baghouses, identified as B and C, exhausted to Stacks B and C, throughput capacity: 35.0 tons of ore per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(3) One (1) roller mill, manufactured in November 1928, connected pneumatically to a baghouse, identified as D, exhausted to Stack D, throughput capacity: 14.0 tons of nonmetallic minerals per hour.

(4) One (1) classifier #1, connected pneumatically to a baghouse, identified as E, exhausted to Stack E, throughput capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(5) Six (6) silos, identified as Red, Green, Blue, Yellow, Pink and Orange, connected pneumatically to baghouses, identified as F, G, H, I, J and K, exhausted to Stacks F, G, H, I, J and K, respectively, throughput capacity: 14.0 tons of nonmetallic

minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(6) One (1) impact mill, manufactured on September 10, 1962, connected pneumatically to a baghouse, identified as M, exhausted to Stack M, throughput capacity: 9.0 tons of nonmetallic minerals per hour.

(b) Four (4) silos, identified as Silo #1, Silo #2, Silo #3 and Silo #4, installed in 1994, connected pneumatically to baghouses, identified as N, O, P and Q, exhausted to Stacks N, O, P and Q, respectively, capacity: 8,313 cubic feet, each, and throughput capacity: 14.0 tons of minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(c) Two (2) silos, identified as Silo #5 and Silo #6, installed in 1994, connected pneumatically to baghouses, identified as R and S, exhausted to Stacks R and S, capacity: 6,107 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(d) Five (5) silos, identified as Silo #7, Silo #8, Silo #9, Silo #10 and Silo #11, installed in 1994, connected pneumatically to baghouses, identified as T, U, V, W and X, exhausted to Stacks T, U, V, W and X, respectively, capacity: 11,083 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(e) One (1) hammer mill micronizer, identified as #1 Bepex, manufactured on December 10, 1974, installed in 1994, connected pneumatically to a baghouse, identified as Y, exhausted to Stack Y, capacity: 1.00 ton of nonmetallic minerals per hour.

(f) One (1) ball mill micronizer, identified as Ball Mill, manufactured on January 25, 1950, connected pneumatically to a baghouse, identified as Z, exhausted to Stack Z, capacity: 7.5 tons of non metallic minerals per hour, two (2) silos, identified as Silo #12 connected pneumatically to a baghouse, identified as AA, throughput capacity: 14.0 tons of nonmetallic minerals per hour, and Silo #13, connected pneumatically to a baghouse, identified as AB, throughput capacity: 35.0 tons of ore per hour, exhausted to Stacks AA and AB, capacity: 6,688 cubic feet, each and one (1) classifier #3, installed in 1994, connected pneumatically to a baghouse, identified as AC, exhausted to Stack AC, capacity: 10.0 tons of minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, Silo #12 and #13 are storage bins and are affected facilities and the classifier #3 is a screening operation and is an affected facility.

(g) One (1) pellet mill and natural gas-fired dryer, identified as Pellet Mill, installed in 1996, connected pneumatically to a baghouse, identified as AY, installed in 2006, exhausted to Stack AY, capacity: 8.0 tons of nonmetallic minerals per hour and rated at 6.0 million British thermal units per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility. Under NSPS, 40 CFR Part 60.730, Subpart UUU, the dryer is an affected facility.

(h) Five (5) material storage silos, identified as Silo A, Silo B, Silo C, Silo D and Silo #14, exhausted to Stacks AG, AH, AI, AJ and AK, respectively, connected pneumatically to baghouses, identified as AG, AH, AI, AJ and AK, respectively, installed in 1997, capacity: 12,038 cubic feet, each, and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Silos A, B, C and D are also connected pneumatically to a common baghouse, identified as AM for unloading/transfer purposes, throughput capacity: 14.0 tons of non-

metallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(i) One (1) Bepex/Air Mill Room, capacity: 2.0 tons of nonmetallic minerals per hour, consisting of:

(1) Three (3) silos, identified as Silo #15, Silo #16 and Silo #17, connected pneumatically to baghouses, identified as AO, AS and AT, exhausted to Stacks AO, AS and AT, throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) single air mill (powder), connected pneumatically to a baghouse, identified as AP, exhausted to Stack AP, throughput capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(j) One (1) twin air mill, connected pneumatically to a baghouse, identified as AU, exhausted to Stack AU, installed in 2004, capacity: 2.0 tons of talc per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(k) One (1) air jet milling system, installed in 2005, capacity of 2.5 tons of nonmetallic minerals per hour, consisting of:

(1) Two (2) silos, identified as Silo #18 and Silo #19, connected pneumatically to baghouses, identified as AV, and AW, exhausted to Stacks AV and AW, capacity; 3,950 cubic feet, each and throughput capacity: 14.0 tons of nonmetallic minerals per hour, each. Under NSPS, 40 CFR Part 60.670, Subpart OOO, these are storage bins and are affected facilities.

(2) One (1) #3 air mill, connected pneumatically to a baghouse, identified as AX, exhausted to Stack AX, capacity 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a grinding mill and is an affected facility.

(l) One (1) classifier #2, connected pneumatically to a baghouse, identified as BA installed in 1995, exhausted to Stack BA, capacity: 10.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a screening operation and is an affected facility.

(m) One (1) Pellet Mill Transfer, connected pneumatically to a baghouse, identified as BB, installed in 1999, exhausted to Stack BB, capacity: 4.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(n) One (1) product recycling bin, connected pneumatically to a baghouse, identified as BC, installed in 2001, exhausted to Stack BC, capacity: 5.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(o) One (1) R1 bin, connected pneumatically to a baghouse, identified as BD, installed in 1994, exhausted to Stack BD, capacity: 25.0 tons of ore per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a storage bin and is an affected facility.

(p) One (1) auto packaging machine operation, connected pneumatically to a baghouse, identified as BF, installed in 2002, exhausted to Stack BF, capacity: 8.0 tons of non-metallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a bagging operation and is an affected facility.

(q) One (1) cosmetic circuit receiver, connected pneumatically to a baghouse, identified as BG, installed in 1992, exhausted to Stack BG, capacity: 7.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a pneumatic system and is an affected facility.

(r) One (1) bulk truck loadout operation, connected pneumatically to a baghouse, identified as BH, installed in 1996, exhausted to Stack BH, capacity: 16.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

(s) One (1) bulk railcar loadout operation, connected pneumatically to a baghouse, identified as BI, installed in 1997, exhausted to Stack BI, capacity: 8.0 tons of nonmetallic minerals per hour. Under NSPS, 40 CFR Part 60.670, Subpart OOO, this is a loading station and is an affected facility.

New Emission Units and Pollution Control Equipment

There are no proposed emission units during this review process.

Emission Units and Pollution Control Equipment Removed From the Source

The following facilities have been removed from the source and are not included in the proposed permit:

(t) One (1) natural gas-fired heater, rated at 4.0 million British thermal units per hour, which was originally part of the grinding plant, was removed from service in 1999. The heater remained unutilized and warehoused at the source until 2003 when it was sold and physically removed from the source.

(u) One (1) #2 Bepex, manufactured on December 10, 1974, equipped with a baghouse, identified as AR, exhausted to Stack AR.

(v) One (1) mica hopper and packaging operation, equipped with a baghouse, identified as BE, installed in 2002, exhausted to Stack BE.

(w) One (1) air mill, identified as AQ, equipped with a baghouse, identified as AP, exhausted to Stack AP.

Emission Units and Pollution Control Equipment Never Installed at the Source

The following facility was never installed at the source and is not included in the proposed permit:

(x) A baghouse, identified as A (#105) for the one (1) crusher system, manufactured on September 14, 1960 (capacity 50.0 tons per hour), exhausted to Stack A.

Existing Approvals

Since the issuance of the MSOP 129-9292-00023 on May 14, 2001, the source has constructed or has been operating under the following approvals as well:

(a) First Minor Permit Revision 129-14294-00023, issued on June 11, 2001;

(b) First Significant Permit Revision 129-16451-00023, issued on December 23, 2002;

(c) First Notice Only Change 129-17275-00023, issued on March 31, 2003;

(d) Second Significant Permit Revision 129-17710-00023, issued on March 23, 2004;

(e) Second Minor Permit Revision 129-20913-00023, issued on May 18, 2005; and

(f) Second Notice Only Change 129-23559-00023, issued on October 26, 2006.

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

The following terms and conditions from previous approvals have been revised in this **MSOP Renewal**:

(a) Second Notice Only Change 129-23559-00023, issued October 26, 2006

PSD minor PM limits contained in Conditions D.1.3(d), (f) and (g), D.2.3(f), D.3.3(a) and (b), D.4.1 and D.5.1(a) and (b).

Reason for Revision: All PM limits for facilities subject to the NSPS Subpart OOO utilized the flow rate and exhaust temperatures to calculate an equivalent pound per hour PM emission rate limit. Due to revisions in these parameters, the equivalent hourly PM emission rates have been revised.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this **MSOP Renewal**:

All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Air Pollution Control Justification as an Integral Part of the Process

The following justification was incorporated into this permit from the previous MSOP 129-9292-00023, issued on May 14, 2001.

All baghouses are used to pneumatically transfer materials throughout the source. Therefore, the primary purpose of these baghouses is not air pollution control.

IDEM, OAQ evaluated these justifications and agreed that all baghouses will be considered as an integral part of the talc, barite and calcium carbonate processing operations. 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 talc, barite and calcium carbonate processes are in operation.

Enforcement Issue

The source had the following enforcement action:

A Notice of Violation (Case No. 2006-15399-A) was issued on March 30, 2006 and an Agreed Order (Case No. 2006-15399-A) was signed on July 21, 2006.

An inspection on November 16, 2005 was conducted at the source by a representative of IDEM's Office Air Quality (OAQ). The following violations were in existence or observed at the time of this inspection:

(a) Pursuant to 326 IAC 12 which adopts by reference 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Process Plants, particulate matter emissions shall not exceed 0.05 grams/dscm from air jet mill AX. The emissions test performed on November 16, 2005, revealed a particulate matter emission of 0.14 grams/dscm, in violation of 40 CFR 60 Subpart OOO.

(b) Pursuant to MSOP 129-9292-00023, Condition D.5.1(b); particulate matter emissions shall not exceed 0.23 pounds per hour from air jet mill AX. The emissions test performed on November 16, 2005 revealed particulate matter emissions of 1.52 pounds per hour, in violation of Condition D.5.1(b).

The Agreed Order requires that Barrett Minerals shall perform emissions testing for particulate matter to demonstrate compliance with 326 IAC 12, 40 CFR 60, Subpart OOO and MSOP Condition D.5.1(b). The test shall be formed between July and December, 2007. Emissions testing shall be performed in accordance with the requirements of 326 IAC 3-6.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^oF)
B	North Silo	45.0	0.67	1,500	70
C	South Silo	45.0	0.67	1,500	70
D	Roller Mill	44.0	1.83	14,000	180
E	Classifier #1	47.0	0.67	1,550	150
F	Red Silo	47.0	0.67	1,500	150
G	Green Silo	47.0	0.67	1,500	150
H	Blue Silo	47.0	0.67	1,500	150
I	Yellow Silo	48.0	0.67	2,000	150
J	Pink Silo	48.0	0.67	2,000	150
K	Orange Silo	48.0	0.67	2,000	70
M	Impact Mill	44.0	1.83	14,000	180
N	#1 Silo	60.0	0.67	900	150
O	#2 Silo	60.0	0.67	900	150
P	#3 Silo	60.0	0.67	900	150
Q	#4 Silo	60.0	0.67	900	150
R	#5 Silo	60.0	0.67	1,500	150
S	#6 Silo	60.0	0.67	1,500	150
T	#7 Silo	78.0	0.67	1,500	150
U	#8 Silo	78.0	0.67	1,500	150

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^oF)
V	#9 Silo	78.0	0.67	1,500	150
W	#10 Silo	78.0	0.67	1,500	150
X	#11 Silo	78.0	0.67	1,500	150
Y	#1 BPX	35.0	0.67	3,000	150
Z	Ball Mill	40.0	2.0	9,000	180
AA	#12 Silo	46.0	0.83	960	150
AB	#13 Silo	46.0	0.83	960	150
AC	Classifier #3	38.0	0.83	1,550	180
AG	Silo A	78.0	0.50	680	150
AH	Silo B	78.0	0.05	1,550	150
AI	Silo C	78.0	0.05	680	150
AJ	Silo D	78.0	0.05	680	150
AK	#14 Silo	78.0	0.05	1,500	150
AM	A-D Transfer	20.0	0.05	680	150
AO	#15 Silo	66.0	N/A	1,500	70
AP	Air Mill (powder)	30.0	N/A	4,000	200
AS	#16 Silo	66.0	0.5	1,000	70
AT	#17 Silo	66.0	0.5	1,000	70
AU	Twin Air Mill	48.0	1.0	5,500	195
AV	#18 Silo	66.0	1.0	1,500	195
AW	#19 Silo	66.0	1.0	1,500	195
AX	#3 Air Mill	30.0	0.83	2,650	200
AY	Pellet Mill	40.0	2.5	19,040	120
BA	Classifier #2	48.0	0.7	1,550	70
BB	Pellet Mill Transfer	20.0	0.7	680	70
BC	Recycle	18.0	1.3	3,000	70
BD	R1	47.0	0.5	1,550	70
BF	Auto Packaging	48.0	0.7	3,000	70
BG	Cosmetic Receiver	48.0	0.7	1,570	70
BH	Bulk Truck	30.0	0.5	1,500	70
BI	Rail Car	35.0	0.5	1,500	70

Emission Calculations

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

County Attainment Status

The source is located in Posey County.

Pollutant	Status
PM_{10}	Attainment
$PM_{2.5}$	Attainment
SO_2	Attainment
NO_X	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Posey County has been classified as attainment or unclassifiable for $PM_{2.5}$. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions.

(b) Volatile organic compounds (VOC) and nitrogen oxides (NO_X) 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 emissions and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Posey County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

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

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	78.1
PM_{10}	69.9
SO_2	0.016
VOC	0.145
CO	2.21
NO_X	2.63

HAPs	tons/year
Benzene	0.00006
Dichlorobenzene	0.00003
Formaldehyde	0.002
Hexane	0.047
Toluene	0.0001
Lead Compounds	0.00001
Cadmium Compounds	0.00003
Chromium Compounds	0.00004
Manganese Compounds	0.00001
Nickel Compounds	0.00006
Total	0.050

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than one hundred (<100) tons per year and the potential to emit PM and PM_{10} is greater than twenty-five (25) tons per year, each. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (<10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (<25) tons per year.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

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

	Potential To Emit (tons/year)						
Process/emission unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**
All Integral Emission Units Subject to NSPS Subpart OOO (except the dryer)	49.0	49.0	-	-	-	-	-
Integral Emission Unit Subject to NSPS Subpart UUU (dryer)	6.65	6.65					
Emission Units Not Subject to NSPS Subpart OOO							
Roller Mill	4.05	4.05	-	-	-	-	-
Impact Mill	4.05	4.05	-	-	-	-	-
#1 Bepex	0.912	0.912	-	-	-	-	-
Ball Mill	2.61	2.61	-	-	-	-	-
Crusher System	0.153	0.153	-	-	-	-	-
Natural Gas Combustion	negligible	0.200	negligible	0.145	2.21	2.63	negligible
Paved Roads	10.4	2.02	-	-	-	-	-
Loading & Unloading	0.354	0.354					
Total Emissions	78.1	69.9	negligible	0.145	2.21	2.63	negligible
Major Source Threshold	250	250	250	250	250	250	-

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

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

Federal Rule Applicability

The following federal rules are applicable to the source:

(a) 40 CFR 60, Subpart OOO and 326 IAC 12

The two (2) silos, identified as North and South, the classifier #1, the six (6) silos, identified as red, green, blue, yellow, pink and orange, the eleven (11) silos, identified as #1 through #11 silos, the two (2) silos, identified as #12 and #13 silos, the classifier #3, the five (5) silos, identified as A through D and silo #14, the five (5) silos, identified as Silo #15 through Silo #19, the single air mill, the twin air mill, the #3 air mill, the pellet mill, the classifier #2, the Pellet Mill Transfer, the product recycling bin, the R1 bin, the auto packaging machine operation, the cosmetic circuit receiver, the bulk truck loadout, and the bulk railcar loadout are subject to the New Source Performance Standard for Nonmetallic Mineral Processing Plants, 40 CFR 60.670, Subpart OOO, which is incorporated by refer-

ence as 326 IAC 12. Each crusher,. grinding mill, screening operation, bucket elevator, belt conveyor, pneumatic conveying system, bagging operation, storage bin, enclosed truck or railcar loading station are affected facilities at nonmetallic mineral processing plants.

Nonapplicable portions of the NSPS will not be included in the permit. The two (2) silos, identified as North and South, the classifier #1, the six (6) silos, identified as red, green, blue, yellow, pink and orange, the eleven (11) silos, identified as #1 through #11 silos, the two (2) silos, identified as #12 and #13 silos, the classifier #3, the five (5) silos, identified as A through D and silo #14, the five (5) silos, identified as Silo #15 through Silo #19, the single air mill, the twin air mill, the #3 air mill, the pellet mill, the classifier #2, the product recycling bin, the R1 bin, the auto packaging machine operation, the bulk truck loadout, and the bulk railcar loadout are subject to the following portions of Subpart OOO.

(1) 40 CFR 60.670

(2) 40 CFR 60.671

(3) 40 CFR 60.672(a - f)

(4) 40 CFR 60.673

(5) 40 CFR 60.675(a), (b), (c)(1)(i and ii), (c)(2, 3 and 4), (d), (e) and (g)

(6) 40 CFR 60.676(a), (f), (h), (i)(1) and (j)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart OOO.

(b) The requirements of New Source Performance Standard for Nonmetallic Mineral Processing Plants, 40 CFR 60.670, Subpart OOO, are not included in the permit for those facilities that were constructed before the August 31, 1983 applicability date of this rule, and not reconstructed or modified thereafter. These facilities constructed/manufactured before the applicability date are the electric crusher system (1960), the roller mill (1928), the impact mill (1962), the hammer mill micronizer (#1 Bepex) (1974), and the ball mill micronizer (1950).

(c) 40 CFR 60, Subpart UUU and 326 IAC 12

The natural gas-fired dryer, identified as part of the Pellet Mill, is subject to the New Source Performance Standard for Calciners and Dryers in Mineral Industries, 40 CFR 60.730, Subpart UUU, which is incorporated by reference as 326 IAC 12. Each calciner and dryer at a mineral processing plant is an affected facility. Since Barrett Minerals Inc. processes talc pursuant to 40 CFR 60.731, this source is considered a mineral processing plant and uses a fluid-bed talc dryer with a baghouse as control, not a wet scrubber, and commenced construction after the April 23, 1986 applicability date of this rule.

Nonapplicable portions of the NSPS will not be included in the permit. The natural gas-fired dryer, identified as part of the Pellet Mill, is subject to the following portions of Subpart UUU.

(1) 40 CFR 60.730

(2) 40 CFR 60.731

(3) 40 CFR 60.732

(4) 40 CFR 60.733

(5) 40 CFR 60.734(a) and (c)

(6) 40 CFR 60.735(a), (c)(1) and (d)

(7) 40 CFR 60.736(a) and (b)

(8) 40 CFR 60.737

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subpart UUU.

(d) The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants, 40 CFR 60.380, Subpart LL, are not included for this source because Barretts Minerals Inc. does not produce metallic mineral concentrates from ore. A metallic mineral concentrate contains at least one of the following metals in any of its oxidation states and at a concentration that contributes to the concentrate's commercial value: aluminum, copper, gold, iron, lead, molybdenum, silver, titanium, tungsten, uranium, zinc, and zirconium.

(e) There are no other New Source Performance Standards (NSPS) (326 IAC 12, and 40 CFR Part 60) included in this permit renewal.

(f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)
This source is located in Posey County and the potential to emit of each criteria pollutant is less than two hundred fifty (250) tons with the integral baghouse controls. In order to assure that the entire source is minor for PSD, the previous MSOP 129-9292-00023 incorporated hourly PM emission limits for each facility. As discussed in the Technical Support Document for the Minor Permit Revision 129-16541-00023, issued on December 23, 2002, PM_{10} emission limits did not need to be specifically incorporated into the MSOP because the more stringent requirement is the Part 70 threshold applicability of one hundred (100) tons per year of the Section C condition requiring prior approval from IDEM if the potential to emit of PM_{10}, SO_2, NO_X, VOC or CO increases to one hundred (100) tons or more per year. For all facilities subject to the requirements of NSPS Subpart OOO, the particulate limit was computed based on the limited grain loading coupled with the air flow and exhaust temperature. Due to revisions in the flow and/or exhaust temperatures, certain facilities have had their limits revised as shown on page 3 of 6 of Appendix A. The entire source is still limited to less than 250 tons per year of PM.

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

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)
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)
All facilities are controlled, except for the crusher system. The crusher system is located inside an ore storage facility which acts to contain these emissions. There are no additional fugitive emissions from any of the facilities. All facilities constructed after August 31, 1983 or April 23, 1986 are subject to the stricter requirements of 326 IAC 12 which incorporates NSPS Subparts OOO or UUU, respectively.

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on September 24, 2007. The plan requires that all dump trucks be tarped when transporting raw ore material into the source and that water shall be applied to outside storage piles on an as-needed basis.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d))
The natural gas-fired dryer, identified as part of the Pellet Mill, installed in 1996, is not an indirect heating combustion unit. Therefore this dryer is not subject to the requirements of this rule.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The particulate from the listed facilities shall be limited as described in the following table:

Facility	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Potential to Emit (lbs/hr) / How will unit comply with 326 IAC 6-3-2?
Crusher System	50.0	44.5	0.035 / no control
Roller Mill	14.0	24.0	0.926 / baghouse
Impact Mill	9.0	17.8	0.926 / baghouse
#1 Bepex	1.0	4.10	0.208 / baghouse
Ball Mill	7.5	15.8	0.595 / baghouse

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

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

or

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

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

The baghouses shall be in operation at all times these facilities are in operation, in order to comply with these limits.

Page 2 of 6 of Appendix A shows that the NSPS Subpart OOO particulate standard is more stringent than the requirements of 326 IAC 6-3-2 for all other facilties and therefore the requirements of 326 IAC 6-3-2 are not applicable to all other listed facilities.

Past Stack Tests Results

Subsequent to the issuance of MSOP 129-9292-00023 on May 14, 2001, Barrett Minerals has performed several stack tests to verify compliance with NSPS Subpart OOO and emission limits stated in the MSOP. The table in the next section incorporates the past stack test results into the compliance determination requirements.

Compliance Determination and Monitoring Requirements

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

(a) The facilities listed have applicable compliance determination conditions as specified below:

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Freq. of Testing	Limit or Requirement	Past Test Results (Date)
North or South Silo	Baghouse B or C	By 4/23/08	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity 0.262 & 0.189 lbs/hr (S & N)	0.002 & 0.006 gr/dscf 0.0% Opacity 0.053 (S) & 0.115 (N) lbs/hr (4/23/03)
Classifier #1	Baghouse E	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
One (1) of Six (6) Silos	Baghouses F - K	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
One (1) of Eleven (11)	Baghouses N - X	By 4/23/08	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity 0.136 lbs/hr	0.001 gr/dscf 0.0% Opacity 0.011 lbs/hr (4/23/03)
Classifier #3	Baghouse AC	By 5/15/10	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	0.007 gr/dscf & 0.01 g/dscm 0.0% & 1.04% Opacity (4/23/03 & 5/15/05)
Pellet Mill	Baghouse AY	By 4/23/08	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity 0.375 & 1.00 lbs/hr	0.004 gr/dscf 0.0% Opacity 0.281 lbs/hr (4/23/03)
Natural Gas Dryer (Pellet Mill)	Baghouse AY	Within 90 days of issuance	PM	Once every five (5) years	0.025 grains/dscf	

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Freq. of Testing	Limit or Requirement	Past Test Results (Date)
One (1) of Three (3) Silos	Baghouses AO, AS or AT	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Air Mill or #3 Air Mill	Baghouse AP or AX	By 3/2/11	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity 0.371 lbs/hr (AM) & 0.23 lbs/hr (AM#3)	0.0003 & 0.001 gr/dscf & 0.14* & 0.0061 g/dcsm 0.0%, 0.0%, 24%, 0.0% Opacity 0.071 lbs/hr (AM) 1.52** lbs/hr (AM#3), 0.06 lbs/hr (AM#3) (9/27/02, 5/27/04, 11/16/05 & 3/2/06)
Classifier #2	Baghouse BA	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Pellet Mill Transfer	Baghouse BB	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Recycle or R1 Bin	Baghouse BC or BD	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Auto Packaging	Baghouse BF	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Cosmetic Receiver	Baghouse BG	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Bulk Truck	Baghouse BA	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	
Bulk Rail	Baghouse BA	Within 180 days of permit issuance	PM/ Opacity	Once every five (5) years	0.05 g/dscm (0.022 gr/dscf) 7% Opacity	

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouses B - Z, AA - AC, AG - AM, AY, BA - BD and BF - BI	Water Pressure Drop	Daily	3 to 6 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Baghouses AO, AP, AS - AX	Water Pressure Drop	Weekly	3 to 5 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because the baghouses for all facilities must operate properly to ensure compliance with 326 IAC 6-3 and 326 IAC 2-2.

Recommendation

The staff recommends to the Commissioner that the **Minor Source Operating Permit** be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on February 13, 2006. Additional information was received on March 6 and 12, April 26, June 12, August 28, and September 24, 2007.

Conclusion

The operation of this stationary talc, barite and calcium carbonate processing source shall be subject to the conditions of the New Source Review and Minor Source Operating Permit 129-22660-00023.

Appendix A: Emission Calculations
Baghouse Operations

Company Name: Barretts Minerals Inc.
Address City IN Zip: 2700 Bluff Road, Mt. Vernon, Indiana 47620
MSOP Renewal: 129-22660-00023
Reviewer: Mark L. Kramer
Date: August 29, 2007

Facilities Subject to Requirements of NSPS Subpart OOO and UUU

Facility Description	Baghouse ID	Control Efficiency (%)	Allowable Loading per Dry Cubic meter of Outlet Air (grams/cubic meter)	Gas or Air Flow Rate (acfm.)	Exhaust Temp. (F)	Average Moisture Content	PM/PM-10 Emission Rate after Controls (lbs/hr)	PM/PM-10 Emission Rate after Controls (tons/yr)
Grinding Plant								
North Silo	B	99.9%	0.05	1500.0	70.0	6.5%	0.262	1.15
South Silo	C	99.9%	0.05	1500.0	70.0	6.5%	0.262	1.15
Classifier #1	E	99.9%	0.05	1550.0	150.0	6.5%	0.235	1.029
Red Silo	F	99.9%	0.05	1500.0	150.0	6.5%	0.227	1.00
Green Silo	G	99.9%	0.05	1500.0	150.0	6.5%	0.227	1.00
Blue Silo	H	99.9%	0.05	1500.0	150.0	6.5%	0.227	1.00
Yellow Silo	I	99.9%	0.05	2000.0	150.0	6.5%	0.303	1.33
Pink Silo	J	99.9%	0.05	2000.0	150.0	6.5%	0.303	1.33
Orange Silo	K	99.9%	0.05	2000.0	70.0	6.5%	0.349	1.53
#1 Silo	N	99.9%	0.05	900.0	150.0	6.5%	0.136	0.597
#2 Silo	O	99.9%	0.05	900.0	150.0	6.5%	0.136	0.597
#3 Silo	P	99.9%	0.05	900.0	150.0	6.5%	0.136	0.597
#4 Silo	Q	99.9%	0.05	900.0	150.0	6.5%	0.136	0.597
#5 Silo	R	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#6 Silo	S	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#7 Silo	T	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#8 Silo	U	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#9 Silo	V	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#10 Silo	W	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#11 Silo	X	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
#12 Silo	AA	99.0%	0.05	960.0	150.0	6.5%	0.146	0.637
#13 Silo	AB	99.0%	0.05	960.0	150.0	6.5%	0.146	0.637
Classifier #3	AC	99.0%	0.05	1550.0	180.0	6.5%	0.224	0.981
Silo A	AG	99.9%	0.05	680.0	150.0	6.5%	0.103	0.451
Silo B	AH	99.9%	0.05	1550.0	150.0	6.5%	0.235	1.029
Silo C	AI	99.9%	0.05	680.0	150.0	6.5%	0.103	0.451
Silo D	AJ	99.9%	0.05	680.0	150.0	6.5%	0.103	0.451
Silo #14	AK	99.9%	0.05	1500.0	150.0	6.5%	0.227	0.996
Common Baghouse	AM	99.9%	0.05	680.0	150.0	6.5%	0.103	0.451
Bepex Air Mill Room								
Silo #15	AO	99.9%	0.05	1500.0	70.0	6.5%	0.262	1.146
Single Air Mill (powder)	AP	99.9%	0.05	4000.0	200.0	6.5%	0.560	2.454
Silo #16	AS	99.9%	0.05	1000.0	70.0	6.5%	0.174	0.764
Silo #17	AT	99.9%	0.05	1000.0	70.0	6.5%	0.174	0.764
Twin Air Mill	AU	99.9%	0.05	5500.0	195.0	6.5%	0.776	3.400
Silo #18	AV	99.9%	0.05	1500.0	195.0	6.5%	0.212	0.927
Silo #19	AW	99.9%	0.05	1500.0	195.0	6.5%	0.212	0.927
#3 Air Mill	AX	99.9%	0.05	2650.0	200.0	6.5%	0.371	1.626
Pellet Mill & Nat. Gas Dryer	AY	99.9%	0.05	19040.0	120.0	6.5%	3.035	13.294
Classifier #2	BA	99.9%	0.05	1550.0	70.0	6.5%	0.270	1.184
Pellet Mill Transfer	BB	99.9%	0.05	680.0	70.0	6.5%	0.119	0.520
Product Recyling Bin	BC	99.9%	0.05	3000.0	70.0	6.5%	0.523	2.292
R1 Bin	BD	99.9%	0.05	1550.0	70.0	6.5%	0.270	1.184
Auto Packaging Machine Op.	BF	99.9%	0.05	3000.0	70.0	6.5%	0.523	2.292
Cosmetic Circuit Receiver	BG	99.9%	0.05	1570.0	70.0	6.5%	0.274	1.200
Bulk Truck Loadout	BH	99.9%	0.05	1500.0	70.0	6.5%	0.262	1.146
Bulk Railcar Loadout	BI	99.9%	0.05	1500.0	70.0	6.5%	0.262	1.146
Subtotal Based on OOO							**14.2**	**62.2**
Nat. Gas Dryer (Subpart UUU)	AY	99.9%	0.025	19040.0	120.0	6.5%	1.52	6.65
Subtotal Worst Case OOO or UUU							**12.7**	**55.6**

Facilities NOT Subject to Either NSPS OOO or UUU

Facility Description	Baghouse ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cu.ft.)	Gas or Air Flow Rate (acfm.)	Exhaust Temp. (F)	Average Moisture Content	PM/PM-10 Emission Rate after Controls (lbs/hr)	PM/PM-10 Emission Rate after Controls (tons/yr)
Roller Mill	D	99.9%	0.01	14000.0	180.0	6.5%	0.926	4.054
Impact Mill	M	99.9%	0.01	14000.0	180.0	6.5%	0.926	4.054
#1 Bepex	Y	99.9%	0.01	3000.0	150.0	6.5%	0.208	0.912
Ball Mill	Z	99.9%	0.01	9000.0	180.0	6.5%	0.595	2.606
Subtotal							**2.654**	**11.627**
Total With Worst Case OOO or UUU from Above							**15.34**	**67.2**

Methodology **PM-10 emission rate has been set equal to the PM emission rate**

Emission Rate in lbs/hr (after controls) = (grams x (1pound/453.5924 grams)/cubic meter x (1 cubic ft/0.02832 cubic meters) x (acfm) x 528/(460 + T) x (100 - Moisture)/100 x (60 min/hr)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Moisture content ranges between 3 - 10%

Appendix A: Emission Calculations
Baghouse Operations

Company Name: Barretts Minerals Inc.
Address City IN Zip: 2700 Bluff Road, Mt. Vernon, Indiana 47620
MSOP Renewal: 129-22660-00023
Reviewer: Mark L. Kramer
Date: August 29, 2007

Allowable Rate of Emissions Pursuant to 326 IAC 6-3-2	Baghouse ID	Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Potential PM Emissions (lbs/hr)	Equivalent NSPS Subpart OOO PM Emissions (lbs/hr)	Is the NSPS Subpart OOO More Stringent than than the Limit Pursuant to 326 IAC 6-3-2 or Not Applicable?
Grinding Plant							
Crusher System		100000	50.0	44.58	0.035	Not Applicable	Not Applicable
North Silo	B	70000	35.0	41.32	0.262	0.262	Yes
South Silo	C	70000	35.0	41.32	0.262	0.262	Yes
Roller Mill	D	28000	14.0	24.03	0.926	Not Applicable	Not Applicable
Classifier #1	E	20000	10.0	19.18	0.235	0.235	Yes
Red Silo	F	28000	14.0	24.03	0.227	0.227	Yes
Green Silo	G	28000	14.0	24.03	0.227	0.227	Yes
Blue Silo	H	28000	14.0	24.03	0.227	0.227	Yes
Yellow Silo	I	28000	14.0	24.03	0.303	0.303	Yes
Pink Silo	J	28000	14.0	24.03	0.303	0.303	Yes
Orange Silo	K	28000	14.0	24.03	0.349	0.349	Yes
Impact Mill	M	18000	9.0	17.87	0.926	Not Applicable	Not Applicable
#1 Silo	N	28000	14.0	24.03	0.136	0.136	Yes
#2 Silo	O	28000	14.0	24.03	0.136	0.136	Yes
#3 Silo	P	28000	14.0	24.03	0.136	0.136	Yes
#4 Silo	Q	28000	14.0	24.03	0.136	0.136	Yes
#5 Silo	R	28000	14.0	24.03	0.227	0.227	Yes
#6 Silo	S	28000	14.0	24.03	0.227	0.227	Yes
#7 Silo	T	28000	14.0	24.03	0.227	0.227	Yes
#8 Silo	U	28000	14.0	24.03	0.227	0.227	Yes
#9 Silo	V	28000	14.0	24.03	0.227	0.227	Yes
#10 Silo	W	28000	14.0	24.03	0.227	0.227	Yes
#11 Silo	X	28000	14.0	24.03	0.227	0.227	Yes
#1 Bepex	Y	2000	1.0	4.10	0.208	Not Applicable	Not Applicable
Ball Mill	Z	15000	7.5	15.82	0.595	Not Applicable	Not Applicable
#12 Silo	AA	28000	14.0	24.03	0.146	0.146	Yes
#13 Silo	AB	70000	35.0	41.32	0.146	0.146	Yes
Classifier #3	AC	20000	10.0	19.18	0.224	0.224	Yes
Silo A	AG	28000	14.0	24.03	0.103	0.103	Yes
Silo B	AH	28000	14.0	24.03	0.235	0.235	Yes
Silo C	AI	28000	14.0	24.03	0.103	0.103	Yes
Silo D	AJ	28000	14.0	24.03	0.103	0.103	Yes
Silo #14	AK	28000	14.0	24.03	0.227	0.227	Yes
Common Baghouse	AM	28000	14.0	24.03	0.103	0.103	Yes
Bepex Air Mill Room							
Silo #15	AO	28000	14.0	24.03	0.262	0.262	Yes
Single Air Mill (powder)	AP	8000	4.0	10.38	0.560	0.560	Yes
Silo #16	AS	28000	14.0	24.03	0.174	0.174	Yes
Silo #17	AT	28000	14.0	24.03	0.174	0.174	Yes
Twin Air Mill	AU	4000	2.0	6.52	0.776	0.776	Yes
Silo #18	AV	28000	14.0	24.03	0.212	0.212	Yes
Silo #19	AW	28000	14.0	24.03	0.212	0.212	Yes
#3 Air Mill	AX	8000	4.0	10.38	0.371	0.371	Yes
Pellet Mill & Nat. Gas Dryer	AY	16000	8.0	16.51	3.035	3.035	Yes
Classifier #2	BA	20000	10.0	19.18	0.270	0.270	Yes
Pellet Mill Transfer	BB	8000	4.0	10.38	0.119	0.119	Yes
Product Recyling Bin	BC	10000	5.0	12.05	0.523	0.523	Yes
R1 Bin	BD	50000	25.0	35.43	0.270	0.270	Yes
Auto Packaging Machine Op.	BF	16000	8.0	16.51	0.523	0.523	Yes
Cosmetic Circuit Receiver	BG	14000	7.0	15.10	0.274	0.274	Yes
Bulk Truck Loadout	BH	32000	16.0	26.28	0.262	0.262	Yes
Bulk Railcar Loadout	BI	16000	8.0	16.51	0.262	0.262	Yes

Methodology
Allowable Emissions = 4.10(Process Weight Rate)^0.67 for process weight rates less than or = to 60,000 pounds per hour
Allowable Emissions = 55(Process Weight Rate)^0.11 - 40 for process weight rates greater than 60,000 pounds per hour

Appendix A: Emission Calculations
Baghouse Operations

Company Name: Barretts Minerals Inc.
Address City IN Zip: 2700 Bluff Road, Mt. Vernon, Indiana 47620
MSOP Renewal: 129-22660-00023
Reviewer: Mark L. Kramer
Date: August 29, 2007

Demonstration of PM limits to keep source minor with respect to 326 IAC 2-2 (PSD)

Facility Description	Baghouse ID	Prior PM Limits From 129-23559-00023 (lbs/hr)	Limited PM Emission Rate after Controls (lbs/hr)	Potential PM Emission Rate (lbs/hr)
Grinding Plant				
Crusher System		2.53	2.53	0.035
North Silo	B	0.262	0.262	0.262
South Silo	C	0.262	0.262	0.262
Roller Mill	D	7.350	7.350	0.926
Classifier #1	E	*0.189*	0.235	0.235
Red Silo	F	0.227	0.227	0.227
Green Silo	G	0.227	0.227	0.227
Blue Silo	H	0.227	0.227	0.227
Yellow Silo	I	*0.265*	0.303	0.303
Pink Silo	J	*0.265*	0.303	0.303
Orange Silo	K	*0.262*	0.349	0.349
Impact Mill	M	7.350	7.350	0.926
#1 Silo	N	0.136	0.136	0.136
#2 Silo	O	0.136	0.136	0.136
#3 Silo	P	0.136	0.136	0.136
#4 Silo	Q	0.136	0.136	0.136
#5 Silo	R	0.227	0.227	0.227
#6 Silo	S	0.227	0.227	0.227
#7 Silo	T	0.227	0.227	0.227
#8 Silo	U	0.227	0.227	0.227
#9 Silo	V	0.227	0.227	0.227
#10 Silo	W	0.227	0.227	0.227
#11 Silo	X	0.227	0.227	0.227
#1 Bepex	Y	3.30	3.30	0.208
Ball Mill	Z	9.43	9.43	0.595
#12 Silo	AA	0.146	0.146	0.146
#13 Silo	AB	0.146	0.146	0.146
Classifier #3	AC		0.224	0.224
Silo A	AG	0.103	0.103	0.103
Silo B	AH	0.235	0.235	0.235
Silo C	AI	0.103	0.103	0.103
Silo D	AJ	0.103	0.103	0.103
Silo #14	AK	0.103	0.227	0.227
Common Baghouse	AM	0.103	0.103	0.103
Bepex Air Mill Room				
Silo #15	AO	*0.174*	0.262	0.262
Single Air Mill (powder)	AP	*0.371*	0.560	0.560
Silo #16	AS	0.174	0.174	0.174
Silo #17	AT	0.174	0.174	0.174
Twin Air Mill	AU	*0.471*	0.776	0.776
Silo #18	AV	*0.130*	0.212	0.212
Silo #19	AW	*0.130*	0.212	0.212
#3 Air Mill	AX	*0.230*	0.371	0.371
Pellet Mill & Nat. Gas Dryer	AY	*1.375*	3.035	3.035
Classifier #2	BA		0.270	0.270
Pellet Mill Transfer	BB		0.119	0.119
Product Recyling Bin	BC		0.523	0.523
R1 Bin	BD		0.270	0.270
Auto Packaging Machine Op.	BF		0.523	0.523
Cosmetic Circuit Receiver	BG		0.274	0.274
Bulk Truck Loadout	BH		0.262	0.262
Bulk Railcar Loadout	BI		0.262	0.262
Total (lbs/hr)		38.6	44.2	16.89
Total (tons/yr)		**168.8**	**193.4**	**74.0**

Limits in Italics have been revised in the renewal

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Barretts Minerals Inc.**
Address City IN Zip: **2700 Bluff Road, Mt. Vernon, Indiana 47620**
MSOP Renewal: **129-22660-00023**
Reviewer: **Mark L. Kramer**
Date: **August 29, 2007**

Natural Gas Fired Dryer part of Pellet Mill @ 6 mmBtu/hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
6.0	53

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.600	100 **see below	5.50	84.0
Potential Emission in tons/yr	0.050	0.200	0.016	2.63	0.145	2.21

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.00210	0.00120	0.07500	1.80000	0.00340
Potential Emission in tons/yr	0.000055	0.000032	0.001971	0.047304	0.000089

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	**Total**
Potential Emission in tons/yr	0.00001	0.00003	0.00004	0.00001	0.00006	**0.050**

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

					PM and PM-10 Each	
Crushing (primary)	50 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.153	tons/yr

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

Company Name: Barretts Minerals Inc.
Address City IN Zip: 2700 Bluff Road, Mt. Vernon, Indiana 47620
MSOP Renewal: 129-22660-00023
Reviewer: Mark L. Kramer
Date: August 29, 2007

Paved Road

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (11/2006).

Dump Trucks

0.7 total trip/hr x — Road = 195 yards each way, truck carries 20 tons of ore
0.222 average miles/round trip x
8760 hr/yr = 2717.6 miles per year

PM Emissions

Ef = k*[(s/2)^0.65]*[(W/3)^1.5]-C
= 3.36 lb/mile
where k = 0.082 (particle size multiplier for PM30 or TSP) (k=0.082 for PM-30 or TSP)
s = 5.5 mean % silt content of concrete batching paved roads

W = 23.00 tons average vehicle weight
C = 0.00047 lbs/mile for exhaust, break and tire wear
E = 3.36 lb/mi x 2717.6 mi/yr = / 2000 lb/ton — 4.56 tons/yr

Taking natural mitigation due to precipitation into consideration:
Eext = E * [1-p/4*365] = 4.17 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10 Emissions

`
Ef = k*[(s/2)^0.65]*[(W/3)^1.5]-C
= 0.66 lb/mile
where k = 0.016 (particle size multiplier for PM10) (k=0.016 for PM-10)
s = 5.5 mean % silt content of concrete batching paved roads

W = 23.00 tons average vehicle weight
C = 0.00047 lbs/mile for exhaust, break and tire wear
E = 0.655 lb/mi x 2717.590909 mi/yr = / 2000 lb/ton — 0.890 tons/yr

Taking natural mitigation due to precipitation into consideration:
Eext = E * [1-p/4*365] = 0.814 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

Front-end Loader

2.8 total trip/hr x
0.153 average miles/round trip x — Road = 135 yards each way, loader carries 5 tons of ore
8760 hr/yr = 7525.6 miles per year

PM Emissions

Ef = k*[(s/2)^0.65]*[(W/3)^1.5]-C
= 1.80 lb/mile
where k = 0.082 (particle size multiplier for PM30 or TSP) (k=0.082 for PM-30 or TSP)
s = 5.5 mean % silt content of concrete batching paved roads

W = 15.15 tons average vehicle weight
C = 0.00047 lbs/mile for exhaust, break and tire wear
E = 1.80 lb/mi x 7525.6 mi/yr = / 2000 lb/ton — 6.76 tons/yr

Taking natural mitigation due to precipitation into consideration:
Eext = E * [1-p/4*365] = 6.18 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

PM-10 Emissions

`
Ef = k*[(s/2)^0.65]*[(W/3)^1.5]-C
= 0.35 lb/mile
where k = 0.016 (particle size multiplier for PM10) (k=0.016 for PM-10)
s = 5.5 mean % silt content of concrete batching paved roads

W = 15.15 tons average vehicle weight
C = 0.00047 lbs/mile for exhaust, break and tire wear
E = 0.350 lb/mi x 7525.636364 mi/yr = / 2000 lb/ton — 1.32 tons/yr

Taking natural mitigation due to precipitation into consideration:
Eext = E * [1-p/4*365] = 1.20 tons/yr

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

Total PM 10.4 tons/yr
Total PM-10 2.02 tons/yr

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

Ef = k*(0.0032)* (U/5)^1.3/(M/2)^1.4
= 0.0016 lb/ton
where k = 0.74 (particle size multiplier)
U = 10 mile/hr mean wind speed
M = 5 % material moisture content

Loading & Unloading 50 ton/hr x 0.0016 lb/ton / 2000 lb/ton x 8760 hr/yr = 0.354 tons/yr

AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated

Company Name: Barretts Minerals Inc.
Address City IN Zip: 2700 Bluff Road, Mt. Vernon, Indiana 47620
MSOP Renewal: 129-22660-00023
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Summary of Emissions
Integral and Uncontrolled Potential Emissions

	PM	PM-10	SO2	NOx	VOC	CO	Lead	HAPs
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
All Integral								
Control Units								
From Page 1	67.2	67.2	0.00	0.00	0.00	0.00	0.00	0.00
Nat. Gas Comb.	0.050	0.200	0.016	2.63	0.145	2.21	0.00050	0.050
Crusher System	0.153	0.153	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	10.4	2.02	0.00	0.00	0.00	0.00	0.00	0.00
Loading & Unload	0.354	0.354	0.00	0.00	0.00	0.00	0.00	0.00
Total	**78.1**	**69.9**	**0.016**	**2.63**	**0.145**	**2.21**	**0.001**	**0.050**

Limited and Controlled Potential Emissions

	PM	PM-10	SO2	NOx	VOC	CO	Lead	HAPs
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
All Integral								
Control Units								
to NSPS OOO/UUU	55.6	55.6	0.00	0.00	0.00	0.00	0.00	0.00
Roller Mill	4.05	4.05	0.00	0.00	0.00	0.00	0.00	0.00
Impact Mill	4.05	4.05	0.00	0.00	0.00	0.00	0.00	0.00
#1 Bepex	0.912	0.912	0.00	0.00	0.00	0.00	0.00	0.00
Ball Mill	2.61	2.61	0.00	0.00	0.00	0.00	0.00	0.00
Nat. Gas Comb.	0.050	0.200	0.016	2.628	0.145	2.208	0.001	0.050
Crusher System	0.153	0.153	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	10.4	2.02	0.00	0.00	0.00	0.00	0.00	0.00
Loading & Unload	0.354	0.354	0.00	0.00	0.00	0.00	0.00	0.00
Total	**78.1**	**69.9**	**0.016**	**2.63**	**0.145**	**2.21**	**0.001**	**0.050**