



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 29, 2011

RE: New NGC Inc. dba National Gypsum Co. / 101-31237-00003

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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-AM.dot12/3/07



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Greg Berry
New NGC Inc. dba National Gypsum Co.
9720 US Hwy 50 E
Shoals, IN 47581

December 29, 2011

Re: F101-31237-00003
Fourth Administrative Amendment to
F101-22910-00003

Dear Mr. Berry:

New NGC Inc. dba National Gypsum Co. was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F101-22910-00003 on December 26, 2007 for a stationary gypsum wallboard manufacturing plant located at 9720 U.S. Highway 50 East, Shoals, Indiana 47581. On December 8, 2011, the Office of Air Quality (OAQ) received an application from the source relating to construction and operation of one grinder for the wallboard manufacturing operation at the source.

Administrative Amendment

The potential to emit of the wallboard grinder is 0.47 tons per year PM and 0.21 tons per year PM10/PM2.5 (see Appendix A - Emissions Calculations). The addition of the wallboard grinder to the permit is considered an administrative amendment, since the potential emissions of regulated criteria pollutants and hazardous air pollutants are less than the ranges specified 326 IAC 2-8-11.1(d)(4) and 326 IAC 2-8-11.1(f)(1)(G), respectively. The entire source will continue to limit any regulated pollutant, except particulate matter (PM) emissions to less than one hundred (100) tons per twelve (12) consecutive month period, any individual hazardous air pollutant (HAP) to less than ten (10) tons per twelve (12) consecutive month period, any combination of HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and particulate matter (PM) to less than two hundred fifty (250) tons per twelve (12) consecutive month period, rendering the requirements of 326 IAC 2-7 not applicable. The addition of this unit will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. The wallboard grinder is an affected facility under 40 CFR 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) in addition to the wallboard crusher already at the source and previously determined to be an affected facility under F101-22910-00003. Pursuant to 326 IAC 2-8-10(a)(15)(E), a modification to a source that is subject to NSPS Subpart OOO qualifies as an administrative amendment, because the NSPS is the most stringent applicable requirement.

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- ...
- (k) **One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.**
- ...

The wallboard grinder is subject to 6-3-2 (Particulate Emission Limitations for Manufacturing Processes). Pursuant to 326 IAC 6-3-2, the particulate emission rate from the uncontrolled wallboard grinder shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons per hour. The grinder's uncontrolled potential to emit PM is 0.108 pounds per hour and so it will be able to comply with this rule. The particulate emission rate from the wallboard grinder has been added to Section D.2 - Operation Conditions. Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as strikeouts and new language **bolded**:

...
SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (i) One (1) wallboard crusher, constructed in 2000, used to break wallboard into small 2 x 2 inch squares, with a 330 horsepower diesel engine and a maximum capacity of 34 tons of wallboard per hour. Under 40 CFR 60, Subpart OOO, the wallboard crusher is considered a crushing operation.
- (k) **One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.**

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

...
D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emission rate from the uncontrolled wallboard grinder shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons per hour. This limit was calculated using the following equation:

The pounds per hour limitation was calculated with the following equation:
Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

D.2.23 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

...
D.2.34 Particulate Matter (PM)

...
D.2.45 Visible Emissions Notations

...
D.2.56 Record Keeping Requirements

...

Greenhouse Gases

Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gases (GHGs) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO₂ equivalent emissions (CO₂e). Therefore, CO₂e emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO₂e per year (see Appendix A for detailed calculations). This requires the following changes to the permit.

IDEM, OAQ has revised Section C.2 Overall Source Limit as follows. IDEM, OAQ made the following revisions with deleted language as ~~strikeouts~~ and new language **bolded**.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) **and greenhouse gases (GHGs)**, from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) **The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.**

...

Additional Changes

Upon further review, IDEM OAQ has decided to incorporate the provisions of NSPS Subpart 000 into a separate section E.1 Emission Unit Operation Conditions and remove the applicability from Section D.2 - Operation Conditions. The provisions of NSPS Subpart 000 will be included as an attachment to the permit and are applicable to the wallboard crusher and wallboard grinder, as specified below and in the permit.

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

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

~~D.2.6 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]~~

- ~~(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for facilities described in this section except as otherwise specified in CFR Part 60, Subpart 000.~~

(b) Pursuant to 40 CFR 60.1, the Permittee shall submit all required notifications and reports to:

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

~~D.2.7 Standards of Performance for Nonmetallic Mineral Processing Plants
[40 CFR Part 60, Subpart 000] [326 IAC 12]~~

~~Pursuant to 40 CFR Part 60, Subpart 000, the Permittee shall comply with the provisions of Standards of Performance for Nonmetallic Mineral Processing Plants, which are incorporated by reference as 326 IAC 12 for facilities described in this section as specified as follows:~~

~~§ 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.~~

~~(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.~~

~~§ 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) of nonmetallic minerals prior to further processing or loading.

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

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

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

Wet 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.

(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.

(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:

[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.

(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 §60.14, 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.

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

(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(e) 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.

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

§ 60.676—Reporting and recordkeeping.

(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.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (i) One (1) wallboard crusher, constructed in 2000, used to break wallboard into small 2 x 2 inch squares, with a 330 horsepower diesel engine and a maximum capacity of 34 tons of wallboard per hour. Under 40 CFR 60, Subpart OOO, the wallboard crusher is considered a crushing operation.
- (k) One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.

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

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

**E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1]
[40 CFR Part 60, Subpart A]**

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for facilities described in this section except as otherwise specified in CFR Part 60, Subpart OOO.

(b) Pursuant to 40 CFR 60.1, the Permittee shall submit all required notifications and reports to:

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

**E.1.2 Standards of Performance for Nonmetallic Mineral Processing Plants
[40 CFR Part 60, Subpart OOO] [326 IAC 12]**

Pursuant to 40 CFR Part 60, Subpart OOO, the Permittee shall comply with the provisions of Standards of Performance for Nonmetallic Mineral Processing Plants, which are incorporated by reference as 326 IAC 12 for facilities described in this section as specified as follows:

- (a) 40 CFR 60.670(a)(1), (d), (e), and (f)
- (b) 40 CFR 60.671
- (c) 40 CFR 60.672(c)
- (d) 40 CFR 60.673
- (e) 40 CFR 60.675(a), (c)(1), (c)(3), and (c)(4)
- (f) 40 CFR 60.676(f), (h)(i)(1), and (j)

E.1.3 Testing Requirements [40 CFR Part 60, Subpart OOO] [326 IAC 12-1] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition E.2.2, the Permittee shall perform testing for fugitive emissions from affected facilities without water sprays, as required under NSPS 40 CFR 60, Subpart OOO, not later than five (5) years from the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall only be performed if the company has not previously performed testing for the same crusher at one of their other Indiana facilities. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

Note: Pursuant to §60.674(b)(1), affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

...

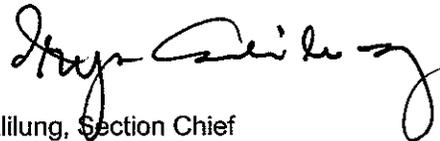
The Table of Contents has also been edited to reflect the changes described in this Administrative Amendment.

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM’s Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Sarah Street, of my staff, at 317-232-8427 or 1-800-451-6027, and ask for extension 2-8427.

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit
Appendix A - Emissions Calculations

IC/ss

cc: File - Martin County
Martin County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

New NGC, Inc. dba National Gypsum Company
9720 U.S. Highway 50 East
Shoals, Indiana 47581

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

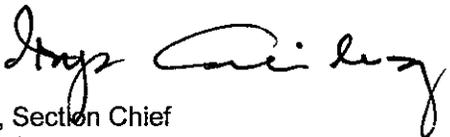
Operation Permit No.: F101-22910-00003	
Original signed by: Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: December 26, 2007 Expiration Date: December 26, 2017
First Administrative Amendment No.: 101-27342-00003, issued on February 26, 2009	
First Minor Permit Revision No.: 101-27980-00003, issued on July 30, 2009	
Second Administrative Amendment No.: 101-28973-00003, issued on March 10, 2010	
Third Administrative Amendment No.: 101-29486-00003, issued on September 2, 2010	
Fourth Administrative Amendment No.: 101-31237-00003	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 29, 2011 Expiration Date: December 26, 2017

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary gypsum wallboard manufacturing plant.

Source Address:	9720 U.S. Highway 50 East, Shoals, Indiana 47581
General Source Phone Number:	(812) 247-2424
SIC Code:	3275
County Location:	Martin
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) secondary crushing and screening operation, identified as Unit 6, constructed in 1955, with a maximum capacity of three hundred fifty (350) tons of rock per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-1.
- (b) One (1) Raymond grinding mill operation, consisting of one (1) natural gas-fired Raymond mill burner, constructed in 2007, with a maximum capacity of ten (10) million British thermal units per hour, and two (2) Raymond gypsum mills, identified as Units 3A and 3B, both constructed in 1955, with a combined maximum capacity of fifty-six (56) tons of gypsum per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-2 and EP-3, respectively. This operation was constructed in 1955 and the 10 million British thermal units per hour burner was replaced with an identical burner in 2007.
- (c) One (1) calcining operation, consisting of the following units:
 - (1) Five (5) flash calcidyne units, identified as Units 4A, 4B, 4C, 4D, and 4E, all constructed in 1981, with a combined maximum capacity of fifty (50) tons of land plaster per hour, each with one (1) natural gas-fired heating unit with a maximum capacity of seven and a half (7.5) million British thermal units per hour; each with PM and PM10 emissions controlled by a baghouse, identified as EP-4, EP-5, EP-6, EP-7, and EP-8; and
 - (2) One (1) holoflite calciner, identified as Unit 4F, constructed in 1955, with a maximum production rate of ten (10) tons of land plaster per hour, equipped with one (1) natural gas-fired heating unit with a maximum capacity of fifteen (15) million British thermal units per hour; with PM and PM10 emissions controlled by a baghouse, identified as EP-27.
- (d) One (1) stucco conveying operation consisting of seven (7) stucco conveyors, identified as Units 7A, 7B, 7C, 7D, 7F, 7G and 7R all constructed in 1955, with a combined maximum

throughput of forty (40) tons of stucco per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-9, EP-13 and EP-14, EP-10, EP-15 and EP-16, EP-17, EP-18, and EP-39, respectively.

- (e) One (1) plaster manufacturing operation, consisting of the following units:
- (1) Three (3) plaster conveyors, identified as Units 7J, 7K, and 7L, all constructed in 1955, with a maximum throughput of forty-two (42) tons of land plaster per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-29, EP-31, and EP-32, respectively;
 - (2) One (1) tube mill, identified as Unit 7Q, constructed in 1955, with a maximum throughput of twenty-one (21) tons of stucco per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-29;
 - (3) Three (3) plaster storage bins, identified as Unit 7N, 7O, and 7P, all constructed in 1955, with a combined maximum throughput of thirteen (13) tons of plaster per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-34, EP-35, and EP-36;
 - (4) One (1) perlite system, identified as Unit 5, approved for construction in 2010, with a maximum capacity of 0.9 tons of expanded perlite per hour, equipped with one (1) bulk bag unloader and one (1) pneumatic conveying operation, with particulate emissions controlled by an integral air/product separator, identified as filter receiver, and exhausting to the indoors; and
 - (5) One (1) plaster mixing and bagging system, identified as Unit 7M, constructed in 1955, with a maximum production rate of thirteen (13) tons of land plaster per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-33.
- (f) One (1) wallboard manufacturing operation, consisting of the following units:
- (1) Two (2) stucco storage silos, identified as Units 7H and 7I, both constructed in 1955, with a combined maximum throughput of forty (40) tons of stucco per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-19 and EP-20, respectively;
 - (2) One (1) coaxial mixing/pulping system, identified as Unit 8D, constructed in 1955, with a maximum throughput of forty-five (45) tons of material per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-24;
 - (3) One (1) natural gas-fired kiln dryer, identified as Unit 2, constructed in 1990 and modified in 2002, with a maximum capacity of ninety-five (95) million British thermal units per hour and venting through stack Z3;
 - (4) One (1) board sawing system, identified as Unit 1A, constructed in 1990, with a maximum production rate of 2,500 square feet of wallboard per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-25;
 - (5) One (1) board end trimming (BET) dunnage sawing process, identified as Unit 1B, constructed in 1955, with a maximum throughput of 2,500 square feet of wallboard per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-25;
 - (6) One (1) BET gridstone system, identified as Unit 1D, constructed in 1990, with a maximum production rate of 2,500 square feet of wallboard per hour, with PM and

PM10 emissions controlled by a baghouse, identified as EP-38;

- (7) One (1) BMA land plaster bin, identified as Unit 8A, constructed in 1955, with a maximum throughput of one (1) ton per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-21;
 - (8) One (1) starch bin, identified as Unit 8B, constructed in 1955, with a maximum throughput of one-tenth (0.1) ton per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-21;
 - (9) One (1) BMA ball mill, identified as Unit 8C, constructed in 1955, with a maximum throughput of one and one-tenth (1.1) tons of mix per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-23; and
 - (10) One (1) chopped dunnage storage bin with conveyor, identified as Unit 1C, constructed in 1955, with a maximum throughput of one (1) ton of dunnage per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-26.
- (g) One (1) underground and totally enclosed mining, primary crushing, and conveying operation with a maximum throughput of 350 tons per hour.
 - (h) One (1) mined rock storage and conveying operation with fugitive emissions.
 - (i) One (1) wallboard crusher, constructed in 2000, used to break wallboard into small 2 x 2 inch squares, with a 330 horsepower diesel engine and a maximum capacity of 34 tons of wallboard per hour. Under 40 CFR 60, Subpart OOO, the wallboard crusher is considered a crushing operation.
 - (k) One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, and not subject to 326 IAC 20-6, including four (4) Safety Kleen parts cleaning operations.
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including two (2) kerosene storage tanks.
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including fifty (50) natural gas-fired space heaters.
- (d) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour, including twenty (20) fuel oil-fired combustion facilities, firing fuel oil containing less than five-tenths (0.5) percent sulfur by weight.
- (e) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, where total capacity of equipment operated by this stationary source does not exceed 2,000,000 British thermal units per hour. The engines were constructed in 1974.
- (f) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less

than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

- (g) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (h) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (i) Closed loop heating and cooling systems, including five (5) closed loop heating and cooling systems with a combined capacity of 0.825 million British thermal units per hour;
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
- (k) Heat exchanger cleaning and repair.
- (l) Paved and unpaved roads and parking lots with public access.
- (m) Underground conveyors.
- (n) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (o) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks and fluid handling equipment.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) Emergency generators, constructed in 1974, including:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
- (r) Stationary fire pumps.
- (s) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, and lead emissions less than two tenths (0.2) ton per year:
 - (1) One (1) storage building, a receiving hopper/feeder, and the associated belt conveyors for the FGD utilization process;

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F101-22910-00003, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-8-4(4)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
 - (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

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

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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

- (a) All terms and conditions of permits established prior to F101-22910-00003 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.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP 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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

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

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

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

C.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 attached plan as in Attachment A.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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

a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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 commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

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

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

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

Indianapolis, Indiana 46204-2251

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

Stratospheric Ozone Protection

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

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) secondary crushing and screening operation, identified as Unit 6, constructed in 1955, with a maximum capacity of three hundred fifty (350) tons of rock per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-1.
- (b) One (1) Raymond grinding mill operation, consisting of one (1) natural gas-fired Raymond mill burner, constructed in 2007, with a maximum capacity of ten (10) million British thermal units per hour, and two (2) Raymond gypsum mills, identified as Units 3A and 3B, both constructed in 1955, with a combined maximum capacity of fifty-six (56) tons of gypsum per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-2 and EP-3, respectively. This operation was constructed in 1955 and the 10 million British thermal units per hour burner was replaced with an identical burner in 2007.
- (c) One (1) calcining operation, consisting of the following units:
 - (1) Five (5) flash calcidyne units, identified as Units 4A, 4B, 4C, 4D, and 4E, all constructed in 1981, with a combined maximum capacity of fifty (50) tons of land plaster per hour, each with one (1) natural gas-fired heating unit with a maximum capacity of seven and a half (7.5) million British thermal units per hour; each with PM and PM10 emissions controlled by a baghouse, identified as EP-4, EP-5, EP-6, EP-7, and EP-8; and
 - (2) One (1) holoflite calciner, identified as Unit 4F, constructed in 1955, with a maximum production rate of ten (10) tons of land plaster per hour, equipped with one (1) natural gas-fired heating unit with a maximum capacity of fifteen (15) million British thermal units per hour; with PM and PM10 emissions controlled by a baghouse, identified as EP-27.
- (d) One (1) stucco conveying operation consisting of seven (7) stucco conveyors, identified as Units 7A, 7B, 7C, 7D, 7F, 7G and 7R all constructed in 1955, with a combined maximum throughput of forty (40) tons of stucco per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-9, EP-13 and EP-14, EP-10, EP-15 and EP-16, EP-17, EP-18, and EP-39, respectively.
- (e) One (1) plaster manufacturing operation, consisting of the following units:
 - (1) Three (3) plaster conveyors, identified as Units 7J, 7K, and 7L, all constructed in 1955, with a maximum throughput of forty-two (42) tons of land plaster per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-29, EP-31, and EP-32, respectively;
 - (2) One (1) tube mill, identified as Unit 7Q, constructed in 1955, with a maximum throughput of twenty-one (21) tons of stucco per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-29;
 - (3) Three (3) plaster storage bins, identified as Unit 7N, 7O, and 7P, all constructed in 1955, with a combined maximum throughput of thirteen (13) tons of plaster per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-34, EP-35, and EP-36;
 - (4) One (1) perlite system, identified as Unit 5, approved for construction in 2010, with a maximum capacity of 0.9 tons of expanded perlite per hour, equipped with one (1) bulk bag unloader and one (1) pneumatic conveying operation, with particulate emissions controlled by an integral air/product separator, identified as filter receiver, and exhausting to the indoors; and
 - (5) One (1) plaster mixing and bagging system, identified as Unit 7M, constructed in 1955, with a maximum production rate of thirteen (13) tons of land plaster per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-33.

Emissions Unit Description:

- (f) One (1) wallboard manufacturing operation, consisting of the following units:
- (1) Two (2) stucco storage silos, identified as Units 7H and 7I, both constructed in 1955, with a combined maximum throughput of forty (40) tons of stucco per hour, each with PM and PM10 emissions controlled by a baghouse, identified as EP-19 and EP-20, respectively;
 - (2) One (1) coaxial mixing/pulping system, identified as Unit 8D, constructed in 1955, with a maximum throughput of forty-five (45) tons of material per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-24;
 - (3) One (1) natural gas-fired kiln dryer, identified as Unit 2, constructed in 1990 and modified in 2002, with a maximum capacity of ninety-five (95) million British thermal units per hour and venting through stack Z3;
 - (4) One (1) board sawing system, identified as Unit 1A, constructed in 1990, with a maximum production rate of 2,500 square feet of wallboard per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-25;
 - (5) One (1) board end trimming (BET) dunnage sawing process, identified as Unit 1B, constructed in 1955, with a maximum throughput of 2,500 square feet of wallboard per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-25;
 - (6) One (1) BET gridstone system, identified as Unit 1D, constructed in 1990, with a maximum production rate of 2,500 square feet of wallboard per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-38;
 - (7) One (1) BMA land plaster bin, identified as Unit 8A, constructed in 1955, with a maximum throughput of one (1) ton per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-21;
 - (8) One (1) starch bin, identified as Unit 8B, constructed in 1955, with a maximum throughput of one-tenth (0.1) ton per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-21;
 - (9) One (1) BMA ball mill, identified as Unit 8C, constructed in 1955, with a maximum throughput of one and one-tenth (1.1) tons of mix per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-23; and
 - (10) One (1) chopped dunnage storage bin with conveyor, identified as Unit 1C, constructed in 1955, with a maximum throughput of one (1) ton of dunnage per hour, with PM and PM10 emissions controlled by a baghouse, identified as EP-26.
- (g) One (1) underground and totally enclosed mining, primary crushing, and conveying operation with a maximum throughput of 350 tons per hour.
- (h) One (1) mined rock storage and conveying operation with fugitive emissions.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2] [326 IAC 2-8]

- (a) The PM/PM10 emissions from the gypsum wallboard manufacturing operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Secondary crushing and screening (Unit 6, Baghouse EP-1)	7.46	5.14
Raymond gypsum mill (Unit 3A, Baghouse EP-2)	0.14	0.09
Raymond gypsum mill (Unit 3B, Baghouse EP-3)	0.14	0.09
Flash calcidyne unit (Unit 4A, Baghouse EP-4)	6.97	1.82
Flash calcidyne unit (Unit 4B, Baghouse EP-5)	6.97	1.82
Flash calcidyne unit (Unit 4C, Baghouse EP-6)	6.97	1.82
Flash calcidyne unit (Unit 4D, Baghouse EP-7)	6.97	1.82
Flash calcidyne unit (Unit 4E, Baghouse EP-8)	6.97	1.82
Holoflite calciner (Unit 4F, Baghouse EP-27)	6.97	1.82
Stucco conveyor (Unit 7A, Baghouse EP-9)	0.02	0.01
Stucco conveyor (Unit 7B, Baghouses EP-13 and EP-14)	0.02	0.01
Stucco conveyor (Unit 7C, Baghouse EP-10)	0.02	0.01
Stucco conveyor (Unit 7D, Baghouses EP-15 and EP-16)	0.02	0.01
Stucco conveyor (Unit 7F, Baghouse EP-17)	0.02	0.01
Stucco conveyor (Unit 7G, Baghouse EP-18)	0.02	0.01
Stucco conveyor (Unit 7R, Baghouse EP-39)	0.02	0.01
Plaster conveyors (Units 7J, 7K, and 7L; Baghouses EP-29, EP-31, and EP-32)	0.12	0.08
Tube Mill (Unit 7Q, Baghouse EP-29)	0.05	0.03
Plaster storage bin (Unit 7N, Baghouse EP-34)	0.11	0.08
Plaster storage bin (Unit 7O, Baghouse EP-35)	0.11	0.08
Plaster storage bin (Unit 7P, Baghouse EP-36)	0.11	0.08
Plaster mixing and bagging system (Unit 7M, Baghouse EP-33)	0.54	0.37
Stucco storage silo (Unit 7H, Baghouse EP-19)	0.53	0.36
Stucco storage silo (Unit 7I, Baghouse EP-20)	0.53	0.36
Coaxial mixing/pulping system (Unit 8D, Baghouse EP-24)	1.87	1.29
Board sawing system (Unit 1A, Baghouse EP-25)*	0.38	0.22
BET dunnage sawing (Unit 1B, Baghouse EP-25)*	0.38	0.22
BET grindstone system (Unit 1D, Baghouse EP-38)*	0.38	0.22
BMA land plaster bin and Starch bin (Unit 8A and 8B, Baghouse EP-21)	0.05	0.03
BMA ball mill (Unit 8C, Baghouse EP-23)	0.05	0.03
Dunnage Storage Bin (Unit 1C, Baghouse EP-26)	0.04	0.03
Wallboard crusher	0.84	0.58
Underground, totally enclosed mining, primary crushing and conveying	0.30	0.08

* Wallboard board sawing system capacity (tons/yr) assumes a 1/2-in. board thickness, 4-ft board width, and weight of lb/100 ft².

- (b) The Raymond mill burner and the holoflite calciner heating unit shall each burn only natural gas.

These limits combined with the PM and PM10 limits in Condition D.2.2 will render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Program) not applicable.

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

Pursuant to 326 IAC 6-3-2 the PM from the secondary crushing, screening, grinding, calcining, stucco conveying, plaster manufacturing, and wallboard manufacturing shall not exceed the pound per hour emission rate established as E in the following formulas:

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

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

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:

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

The emission units shall be limited as follows:

Emission Unit	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
Secondary crushing and screening (Unit 6, Stack EP-1)	350	64.8
Raymond gypsum mill (Unit 3A, Stack EP-2)	28.0	38.2
Raymond gypsum mill (Unit 3B, Stack EP-3)	28.0	38.2
Flash calcidyne unit (Unit 4A, Stack EP-4)	10.0	19.2
Flash calcidyne unit (Unit 4B, Stack EP-5)	10.0	19.2
Flash calcidyne unit (Unit 4C, Stack EP-6)	10.0	19.2
Flash calcidyne unit (Unit 4D, Stack EP-7)	10.0	19.2
Flash calcidyne unit (Unit 4E, Stack EP-8)	10.0	19.2
Holoflite calciner (Unit 4F, Stack EP-27)	10.0	19.2
Stucco conveyor (Unit 7A, Stack EP-9)	4.44	11.1
Stucco conveyor (Unit 7B, Stack EP-13)	4.44	11.1
Stucco conveyor (Unit 7B, Stack EP-14)	4.44	11.1
Stucco conveyor (Unit 7C, Stack EP-10)	4.44	11.1
Stucco conveyor (Unit 7D, Stack EP-15)	4.44	11.1
Stucco conveyor (Unit 7D, Stack EP-16)	4.44	11.1
Stucco conveyor (Unit 7F, Stack EP-17)	4.44	11.1
Stucco conveyor (Unit 7G, Stack EP-18)	4.44	11.1
Stucco conveyor (Unit 7R, Stack EP-39)	4.44	11.1
Plaster conveyor and Tube Mill (Unit 7J and 7Q, Stack EP-29)	42.0	43.0
Plaster conveyor (Unit 7K, Stack EP-31)	10.5	19.8
Plaster conveyor (Unit 7L, Stack EP-32)	10.5	19.8
Plaster storage bin (Unit 7N, Stack EP-34)	4.33	11.0
Plaster storage bin (Unit 7O, Stack EP-35)	4.33	11.0
Plaster storage bin (Unit 7P, Stack EP-36)	4.33	11.0
Perlite System (Unit 5)	0.90	3.82

Emission Unit	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
Plaster mixing and bagging system (Unit 7M, Stack EP-33)	13.0	22.9
Stucco storage silo (Unit 7H, Stack EP-19)	20.0	30.5
Stucco storage silo (Unit 7I, Stack EP-20)	20.0	30.5
Coaxial mixing/pulping system (Unit 8D, Stack EP-24)	45.0	43.6
Board sawing system and BET dunnage sawing process (Unit 1A and 1B, Stack EP-25)	0.03	0.35
BET grindstone system (Unit 1D, Stack EP-38)	0.01	0.22
BMA land plaster bin and Starch bin (Unit 8A and 8B, Stack EP-21)	1.10	4.37
BMA ball mill (Unit 8C, Stack EP-23)	1.00	4.10
Chopped dunnage storage bin with conveyor (Unit 1C, Stack EP-26)	1.00	4.10
Wallboard crusher	34.0	41.1
Underground, totally enclosed mining, primary crushing and conveying	350	64.8

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emissions may exceed the emission limits shown in the table above, provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

-
- (a) The Permittee shall comply with the following when drying regular wallboard in the natural gas-fired dryer (Unit 2):
 - (1) VOC emissions shall not exceed 0.0572 pounds per ton of regular wallboard dried.
 - (2) The regular wallboard drying rate shall not exceed 400,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (b) The Permittee shall comply with the following when drying XP wallboard in the natural gas-fired dryer (Unit 2):
 - (1) VOC emissions shall not exceed 0.19 pounds per ton of XP wallboard dried.
 - (2) The XP wallboard drying rate shall not exceed 75,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits shall limit the potential to emit VOC from the wallboard manufacturing operation to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.1.5 Particulate Control [326 IAC 2-8-5]

- (a) In order to comply with Conditions D.1.1 and D.1.2, the cyclone, baghouses, and integral filter receiver for particulate control shall be in operation and control emissions from the crushing, screening, grinding, calcining, conveying, plaster manufacturing, and wallboard manufacturing operations at all times 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.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Pursuant to Air-014-NPD and in order to verify compliance with 326 IAC 2-8-4 and Condition D.1.3(b)(1), the source shall perform a one-time performance test to verify the VOC emission factor when drying XP wallboard in the natural gas-fired kiln dryer (Unit 2) not later than 180 days after initial use of any silicone based additive material in the production of XP wallboard, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.7 Visible Emissions Notations

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

D.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the gypsum wallboard manufacturing process, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range listed in the table below or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Baghouse	Pressure Drop Range (in of water)
EP-1, EP-4, EP-5, EP-6, EP-7, EP-8, EP-9, EP-15, EP-16, EP-17, EP-18, EP-39, EP-31, EP-32, EP-34, EP-35, EP-36, EP-29, EP-33, EP-25, EP-26, EP-27, EP-38	1 to 7
EP-2, EP-3	3 to 12
EP-10, EP-13, EP-14, EP-19, EP-20, EP-23, EP-24, EP-21	1 to 6
EP-37a, EP-37b	1 to 6

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

D.1.9 Broken or Failed Bag Detection

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

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

D.1.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.11 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.3, the Permittee shall keep records of the amount of regular and XP wallboard dried in the natural gas-fired kiln dryer (Unit 2). Records necessary to demonstrate compliance shall be available no later than thirty (30) days of the end of each compliance period.
- (b) To document the compliance status with Conditions D.1.7, the Permittee shall maintain records of daily visible emission notations of the stack exhaust listed in this section of this permit. 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 process did not operate that day).
- (c) To document the compliance status with Condition D.1.8, the Permittee shall maintain records once per day of the pressure drop during normal operation. 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 process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance status with Condition D.1.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (i) One (1) wallboard crusher, constructed in 2000, used to break wallboard into small 2 x 2 inch squares, with a 330 horsepower diesel engine and a maximum capacity of 34 tons of wallboard per hour. Under 40 CFR 60, Subpart OOO, the wallboard crusher is considered a crushing operation.
- (k) One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

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

Pursuant to 326 IAC 6-3-2, the particulate emission rate from the uncontrolled wallboard crusher shall not exceed 41.1 pounds per hour when operating at a process weight rate of 34 tons per hour. This limit was calculated using the following equation:

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

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

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

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emission rate from the uncontrolled wallboard grinder shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons per hour. This limit was calculated using the following equation:

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

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

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

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventative Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

Pursuant to AA101-11771-0003, issued August 7, 2000, the crushing operation shall be controlled utilizing a wet suppression system on an as-needed basis.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.5 Visible Emissions Notations

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the wallboard crusher stack exhaust. 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 process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, and not subject to 326 IAC 20-6, including four (4) Safety Kleen parts cleaning operations.
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including two (2) kerosene storage tanks.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

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

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

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

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32)

millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (i) One (1) wallboard crusher, constructed in 2000, used to break wallboard into small 2 x 2 inch squares, with a 330 horsepower diesel engine and a maximum capacity of 34 tons of wallboard per hour. Under 40 CFR 60, Subpart OOO, the wallboard crusher is considered a crushing operation.
- (k) One (1) wallboard grinder, approved for construction in 2012, with a maximum capacity of 20 tons of wallboard per hour, utilizing no control, with emissions exhausting outdoors. Under 40 CFR 60, Subpart OOO, the wallboard grinder is considered an affected facility.

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

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

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for facilities described in this section except as otherwise specified in CFR Part 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.1, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Standards of Performance for Nonmetallic Mineral Processing Plants [40 CFR Part 60, Subpart OOO] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart OOO, the Permittee shall comply with the provisions of Standards of Performance for Nonmetallic Mineral Processing Plants, which are incorporated by reference as 326 IAC 12 for facilities described in this section as specified as follows:

- (a) 40 CFR 60.670(a)(1), (d), (e), and (f)
- (b) 40 CFR 60.671
- (c) 40 CFR 60.672(c)
- (d) 40 CFR 60.673
- (e) 40 CFR 60.675(a), (c)(1), (c)(3), and (c)(4)
- (f) 40 CFR 60.676(f), (h)(i)(1), and (j)

E.1.3 Testing Requirements [40 CFR Part 60, Subpart OOO] [326 IAC 12-1] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition E.2.2, the Permittee shall perform testing for fugitive emissions from affected facilities without water sprays, as required under NSPS 40 CFR 60, Subpart OOO, not later than five (5) years from the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall only be

performed if the company has not previously performed testing for the same crusher at one of their other Indiana facilities. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

Note: Pursuant to §60.674(b)(1), affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: New NGC, Inc. dba National Gypsum Company
Source Address: 9720 U.S. Highway 50 East, Shoals, Indiana 47581
FESOP Permit No.: F101-22910-00003

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:

Date:

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: New NGC, Inc. dba National Gypsum Company
Source Address: 9720 U.S. Highway 50 East, Shoals, Indiana 47581
FESOP Permit No.: F101-22910-00003

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report

Source Name: New NGC, Inc. dba National Gypsum Company
Source Address: 9720 U.S. Highway 50 East, Shoals, Indiana 47581
FESOP Permit No.: F101-22910-00003
Facility: Natural Gas-Fired Kiln Dryer (Unit 2)
Parameter: Regular and XP Wallboard Drying Rate
Limit: The regular wallboard drying rate shall not exceed 400,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month and the XP wallboard drying rate shall not exceed 75,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Wallboard Type	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Regular			
	XP			
Month 2	Regular			
	XP			
Month 3	Regular			
	XP			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: New NGC, Inc. dba National Gypsum Company
Source Address: 9720 U.S. Highway 50 East, Shoals, Indiana 47581
FESOP Permit No.: F101-22910-00003

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Attachment A
Fugitive Particulate Matter Emission Control Plan**

1. Name and address of the source:

New NGC, Inc. dba National Gypsum Company
9720 US Hwy 50
Shoals, IN 47581

2. Name and address of the owner or operator responsible for the execution of the control plan:

Same as above.

3. Identification of all processes, operation, and areas which have the potential to emit fugitive particulate matter:

Screen House
Truck Loading
Wallboard Grinder
Unpaved Roads

4. A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.:

A map is included as an attachment.

5. The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots:

Over the road trucks will load out from the facility between the hours of 7:00 – 3:00 Monday – Friday. The number of trucks can vary from none to 25 or 30 per day. The majority of roads are paved; roads around the rock piles are not paved. Employees travel the paved roads to the various employee parking lots located around the plant.

6. Type and quantity of material handled:

Crushed gypsum rock is handled at this facility both in the wallboard manufacturing process and sold to outside customers. Approximately 325,000 tons are used in the process and 100,000 tons sold. Cull wallboard is recycled in the wallboard grinder. The volume of this material can vary from a few hundred tons to a few thousand.

7. Equipment used to maintain aggregate piles:

A front end loader is used to handle rock and a forklift and front end loader are used to handle cull wallboard.

8. A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in section 3:

The screen house uses enclosed belts and water sprays to control dust.
Unpaved roads are cleaned and watered as necessary to control dust
The wallboard chopper uses a mix of wet and dry cull material to control dust. (Wet Cull is material rejected prior to the kiln; Dry cull is material rejected after the kiln). In the proper ratio, little to no dust will be generated.

9. A specification of the dust suppressant material, such as oil or chemical including estimated frequency of application rates and concentrations:

Only water is used on an as needed basis on unpaved roadways.

10. A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.

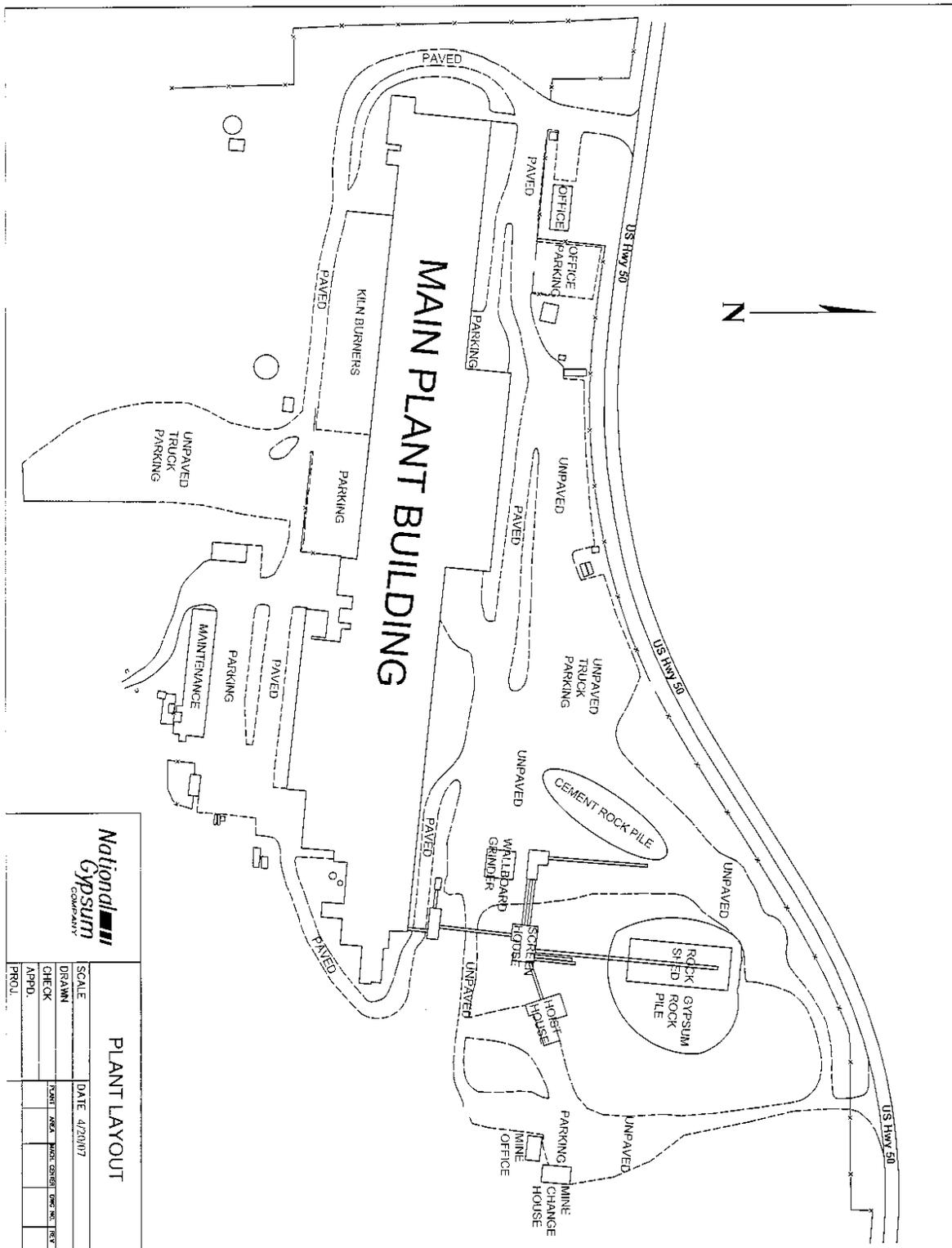
The facility does not utilize any fugitive particulate matter collection equipment.

11. A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures:

If a dusting issue occurs, it will be addressed using the methods specified in number 9 above.

12. Other relevant data:

No other data.



National Gypsum Company

PLANT LAYOUT

SCALE	DATE	4/20/17
DRAWN	BY	
CHECK	BY	
APPD.	BY	
PROJ.	NO.	

**Minor Source Operating Permit (MSOP)
OFFICE OF AIR QUALITY**

**New NGC, Inc. dba National Gypsum Company
Shoals, Indiana**

Attachment B

Title 40: Protection of Environment

**PART 60 – STANDARDS OF PERFORMANCE FOR NEW STATIONARY
SOURCES (NSPS)**

**Subpart 000
Standards of Performance for Nonmetallic Mineral
Processing Plants**

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

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

§ 60.670 Applicability and designation of affected facility.

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.671 Definitions.

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

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

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

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

Building means any frame structure with a roof.

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

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

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

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

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

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

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

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

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

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

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

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

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

(2) Sand and Gravel.

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

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

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

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

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

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 60.672 Standard for particulate matter (PM).

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

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

(c) [Reserved]

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

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

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

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

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

§ 60.673 Reconstruction.

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

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

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

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

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

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

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

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

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

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

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

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

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

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

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

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

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

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

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

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

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

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

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

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

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

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

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

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

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

(ii) Sealing off defective bags or filter media;

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

(iv) Sealing off a defective fabric filter compartment;

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

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

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

§ 60.675 Test methods and procedures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Where:

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

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

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

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

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

(h) [Reserved]

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

§ 60.676 Reporting and recordkeeping.

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

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

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

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

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

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

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

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

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

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

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

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

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

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

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

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

Table 3 to Subpart 000—Fugitive Emission Limits

Table 3 to Subpart 000—Fugitive Emission Limits

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

**Appendix A: Emission Calculations
Emissions Summary**

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Unlimited Potential To Emit (tons/year)										
Process	PM	PM10	PM2.5*	SO₂	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Single HAP
Mining and Primary Crushing	0.92	0.34	0.34	-	-	-	-	-	-	-
Secondary Crushing and Screening	1,732	1,732	1,732	-	-	-	-	-	-	-
Rock Storage and Conveying	**	**	**	-	-	-	-	-	-	-
Raymond Grinding Mill Operation	63.8	63.8	63.8	-	-	-	-	-	-	-
Calcining Operation	9,724	3,679	3,679	-	-	-	-	-	-	-
Stucco Conveying Operation	26.3	26.3	26.3	-	-	-	-	-	-	-
Plaster Operations and Tube Mill	244	244	244	-	-	-	-	-	-	-
Wallboard Manufacturing Operation	973	933	933	-	-	41.21	-	-	2.67	2.67 Formaldehyde
Wallboard Crusher	2.53	2.53	2.53	-	-	-	-	-	-	0.00
Wallboard Grinder	0.47	0.21	0.21	-	-	-	-	-	-	-
Natural Gas Combustion Only	1.36	5.46	5.46	0.43	71.83	3.95	60.34	86,723	1.36	1.29 Hexane
Fuel Oil Combustion Only	0.18	0.21	0.19	6.31	1.78	0.03	0.44	1,917	negligible	negligible
Total	12,768	6,688	6,688	6.74	73.61	45.2	60.8	88,640	4.03	2.67 Formaldehyde

Limited Potential to Emit After Issuance (tons/year)										
Process	PM	PM10	PM2.5*	SO₂	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Single HAP
Mining and Primary Crushing	1.33	0.34	0.34	-	-	-	-	-	-	-
Secondary Crushing and Screening	32.7	22.5	22.52	-	-	-	-	-	-	-
Rock Storage and Conveying	**	**	**	-	-	-	-	-	-	-
Raymond Grinding Mill Operation	1.20	0.83	0.83	-	-	-	-	-	-	-
Calcining Operation	183.3	47.8	47.83	-	-	-	-	-	-	-
Stucco Conveying Operation	0.50	0.34	0.34	-	-	-	-	-	-	-
Plaster Operations and Tube Mill***	5.38	3.96	3.96	-	-	-	-	-	-	-
Wallboard Manufacturing Operation	18.3	12.1	12.13	-	-	18.57	-	-	1.23	1.23 Formaldehyde
Wallboard Crusher	3.67	2.53	2.53	-	-	-	-	-	-	0.00
Wallboard Grinder	0.47	0.21	0.21	-	-	-	-	-	-	-
Natural Gas Combustion Only	1.36	5.46	5.46	0.43	71.83	3.95	60.34	86,723	1.36	1.29 Hexane
Fuel Oil Combustion Only	0.18	0.21	0.19	6.31	1.78	0.03	0.44	1,917	negligible	negligible
Total	248.37	96.36	96.33	6.74	73.61	22.55	60.78	88,640	2.59	1.29 Hexane

*PM2.5=PM10

** Pursuant to F101-14599-00003 issued January 4, 2002, the emissions generated due to the storage of the mined materials (rock) are determined to be fugitive. Fugitive emissions from this process are not included in determining PTE because this source is not one of the 28 listed source categories and this source is not a source category regulated under a NSPS or NESHAPs issued before August 7, 1980.

*** Includes new perlite system (Unit 5), which is controlled by an integral air/perlite separator (identified as filter receiver). This system replaced the existing perlite expander. The addition of this unit did not require any adjustments to the existing PM and PM10 emission limits.

**Appendix A: Emission Calculations
Potential to Emit of Revision**

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Potential to Emit of Revision (tons/yr)									
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	HAPs
PTE of additional Wallboard Grinder	0.47	0.21	0.21	-	-	-	-	-	-
Limited PTE of Entire Source After Revision	248.37	96.36	96.33	6.74	73.61	22.55	60.78	88,640	2.59

**Appendix A: Emission Calculations
Limited Potential to Emit PM and PM10**

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Emissions Unit Description	PM Limit (lbs/hr)	PM Limit (tons/yr)	PM10 Limit* (lbs/hr)	PM10 Limit* (tons/yr)
Secondary crushing and screening (Unit 6, Baghouse EP-1)	7.46	32.7	5.14	22.5
Raymond gypsum mill (Unit 3A, Baghouse EP-2)	0.14	0.60	0.09	0.41
Raymond gypsum mill (Unit 3B, Baghouse EP-3)	0.14	0.60	0.09	0.41
Flash calcidyne unit (Unit 4A, Baghouse EP-4)	6.97	30.5	1.82	8.0
Flash calcidyne unit (Unit 4B, Baghouse EP-5)	6.97	30.5	1.82	8.0
Flash calcidyne unit (Unit 4C, Baghouse EP-6)	6.97	30.5	1.82	8.0
Flash calcidyne unit (Unit 4D, Baghouse EP-7)	6.97	30.5	1.82	8.0
Flash calcidyne unit (Unit 4E, Baghouse EP-8)	6.97	30.5	1.82	8.0
Holoflote calciner (Unit 4F, Baghouse EP-27)	6.97	30.5	1.82	8.0
Stucco conveyor (Unit 7A, Baghouse EP-9)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7B, Baghouses EP-13 and EP-14)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7C, Baghouse EP-10)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7D, Baghouses EP-15 and EP-16)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7F, Baghouse EP-17)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7G, Baghouse EP-18)	0.02	0.07	0.01	0.05
Stucco conveyor (Unit 7R, Baghouse EP-39)	0.02	0.07	0.01	0.05
Plaster conveyors (Units 7J, 7K, and 7L; Baghouses EP-29, EP-31, and EP-32)	0.12	0.52	0.08	0.36
Tube Mill (Unit 7Q, Baghouse EP-29)	0.05	0.21	0.03	0.14
Plaster storage bin (Unit 7N, Baghouse EP-34)	0.11	0.50	0.08	0.35
Plaster storage bin (Unit 7O, Baghouse EP-35)	0.11	0.50	0.08	0.35
Plaster storage bin (Unit 7P, Baghouse EP-36)	0.11	0.50	0.08	0.35
Perlite System (Unit 5, controlled by an integral air/perlite separator (identified as filter receiver) ¹)	0.18	0.79	0.18	0.79
Plaster mixing and bagging system (Unit 7M, Baghouse EP-33)	0.54	2.36	0.37	1.63
Stucco storage silo (Unit 7H, Baghouse EP-19)	0.53	2.31	0.36	1.59
Stucco storage silo (Unit 7I, Baghouse EP-20)	0.53	2.31	0.36	1.59
Coaxial mixing/pulping system (Unit 8D, Baghouse EP-24)	1.87	8.17	1.29	5.64
Board sawing system (Unit 1A, Baghouse EP-25) ^{2,3}	0.38	1.65	0.22	0.97
BET dunnage sawing process (Unit 1B, Baghouse EP-25) ^{2,3}	0.38	1.65	0.22	0.97
BET grindstone system (Unit 1D, Baghouse EP-38) ^{2,3}	0.38	1.65	0.22	0.97
BMA land plaster bin and Starch bin (Unit 8A and 8B, Baghouse EP-21)	0.05	0.20	0.03	0.14
BMA ball mill (Unit 8C, Baghouse EP-23)	0.05	0.20	0.03	0.14
Dunnage Storage Bin (Unit 1C, Baghouse EP-26)	0.04	0.18	0.03	0.13
Wallboard crusher	0.84	3.67	0.58	2.53
Underground, totally enclosed mining, primary crushing and conveying	0.30	1.33	0.08	0.34
246.4				90.5

¹ New Perlite System (Unit 5) is controlled by an integral air/perlite separator. Therefore, the potential to emit was determined after control and this unit does not require PM/PM10 limits in order to limit the source wide PM emissions to less than 250 tons per year and PM10 emissions to less than 100 tons per year.

² Wallboard board sawing system capacity (tons/yr) assumes a 1/2-in. board thickness, 4-ft board width, and weight of lb/100 ft².

³ Emission factor in units of pounds per square foot.

Methodology

*PM2.5=PM10

**Appendix A: Emission Calculations
Gypsum Material Handling and Product Processing**

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Pit ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

A. Mining and Primary Crushing

The blasting, mining, and primary crushing at this source is conducted underground (400 - 500 ft). Further, the conveyors and screw feeders associated with this operation are totally enclosed with a maximum throughput of 70 tons per hour.

Pollutant	Max. Rate (tons/hr)	Emission Factor (lb/ton)	Emissions (tons/yr)
PM	70.0	0.003	0.92
PM10	70.0	0.001	0.34

PM and PM10 emission factor from FIRE, SCC#3-05-020-06 (Stone Quarrying - Processing > Miscellaneous Operations: Screen/Convey/Handling)

Methodology:

PM PTE UnControlled (tons/yr) = Max. Rate (tons/hr) * Emission factor (lbs/ton)

B. Secondary Crushing and Screening (identified as Unit 6) Controlled by a Baghouse (identified as EP-1)

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	350	1.13	1,732	98.7%	22.5
PM10	350	1.13	1,732	98.7%	22.5

PM and PM10 emission factor from FIRE, SCC#3-05-015-06 (Gypsum Manufacture, Secondary Crushing: Gypsum Ore)

Fugitive emissions from this process are not included in determining PTE because this source is not one of the 28 listed source categories and no NSPS or NESHAPs apply that were in effect for this source category on August 7, 1980.

Methodology:

PM PTE Controlled (tons/yr) = Max. Rate (tons/hr) * Emission factor (lbs/ton) * (1 - Control Efficiency%)

C. Rock Storage and Conveying

Pursuant to F101-14598.7-00003 issued January 4, 2002 the emissions generated due to the storage and conveying of the mined materials was determined to be fugitive. Fugitive emissions from this process are not included in determining PTE because this source is not one of the 28 listed source categories and no NSPS or NESHAPs apply that were in effect for this source category on August 7, 1980.

D. Raymond Grinding Mill Operation (identified as Units 3A and 3B) Controlled by Baghouses (identified as as EP-2 and EP-3)

1. Processing and Transport

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	56.0	0.26	63.8	98.7%	0.83
PM10	56.0	0.26	63.8	98.7%	0.83

PM and PM10 emission factor from FIRE, SCC#3-05-015-05 (Gypsum Manufacture, Primary Crushing: Gypsum Ore)

2. Combustion

see combustion calculations

Gypsum Material Handling and Product Processing (Continued)

E. Calcining Operation

1. Flash calcidyne units (identified as Units 4A, 4B, 4C, 4D, and 4E) controlled by a baghouse (identified as EP-4, EP-5, EP-6, EP-7, and EP-8):

A. Processing and Transport:

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	50.0	37	8,103	98.7%	105.3
PM10	50.0	14	3,066	98.7%	39.9

Emission factors from FIRE, SCC#3-05-015-12 (Flash Calciner - Uncontrolled)

B. Combustion

see combustion calcs

2. Holofite Calciner (identified as Unit 4F) controlled by a baghouse (identified as EP-27):

A. Processing and Transport:

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	10.0	37	1,621	98.7%	21.1
PM10	10.0	14	613	98.7%	7.97

Emission factors from FIRE, SCC#3-05-015-12 (Flash Calciner - Uncontrolled)

B. Combustion

see combustion calcs

F. Stucco Conveying Operation (identified as Units 7A, 7B, 7C, 7D, 7F, 7G, and 7R) Controlled by a Baghouse (identified as EP-9, EP-13, EP-14, EP-10, EP-15, EP-16, EP-17, EP-18, and EP-39):

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	40.0	0.15	26.3	98.7%	0.34
PM10	40.0	0.15	26.3	98.7%	0.34

Emission factors from FIRE, SCC#3-05-015-04 (Gypsum Manufacture, Conveying)

G. Plaster Manufacturing Operation

1. Plaster Conveyor (identified as Units 7J, 7K, and 7L) controlled by a baghouse (identified as EP-29, EP-31, and EP-32):

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	42.0	0.15	27.6	98.7%	0.36
PM10	42.0	0.15	27.6	98.7%	0.36

Emission factors from FIRE, SCC#3-05-015-04 (Gypsum Manufacture, Conveying)

2. Tube Mill (identified as Unit 7Q) controlled by a baghouse (identified as EP-29):

Pollutant	Max. Rate (tons/hr)	Controlled Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	21.0	0.12	11.0	98.7%	0.14
PM10	21.0	0.12	11.0	98.7%	0.14

Emission factors from AP-42, Chapter 11.16 (Gypsum Manufacturing), Table 11.16-2 roller mill with fabric filter (SCC 3-05-015-02). Assume that all PM10 emissions are equal to PM.

Gypsum Material Handling and Product Processing (Continued)

3. Plaster Storage Bins (identified as Unit 7N, 7O, and 7P) controlled by a baghouse (identified as EP-34, EP-35, and EP-36):

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	13.0	1.4	79.7	98.7%	1.04
PM10	13.0	1.4	79.7	98.7%	1.04

Emission factors from FIRE, SCC#3-05-016-10 (Lime Manufacture, Raw Material Storage Piles)
 No emission factors are available for product storage bins. Using the factor for lime storage piles is a worst case assumption.

4. New Perlite System (identified as Unit 5) controlled by an integral air/perlite separator (identified as filter receiver).

Pollutant	Max. Rate (ton/hr)	Control Efficiency (%)	PTE (lbs/hr)*	PTE (tons/yr)*
PM	0.90	99.99%	0.18	0.79
PM10**	0.90	99.99%	0.18	0.79

*Perlite System potential to emit determined after integral air/perlite separator.
 ** PM2.5 = PM10

Methodology

PTE (lbs/hr) = Max. Rate (ton/hr) * (1-Control Efficiency %) * 2000 (lbs/ton)
 PTE (tons/yr) = PTE (lbs/hr) * 8760 (hrs/yr) * 1/2000 (ton/lbs)

5. Plaster Mixing and Bagging (identified as Unit 7M) controlled by a baghouse (identified as EP-33):

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	13.0	2.2	125	98.7%	1.63
PM10	13.0	2.2	125	98.7%	1.63

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

H. Wallboard Manufacturing Operation

1. Stucco Storage Silos (identified as Units 7H and 7I) controlled by a baghouse (identified as EP-19 and EP-20):

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	40.0	1.4	245	98.7%	3.19
PM10	40.0	1.4	245	98.7%	3.19

Emission factors from FIRE, SCC#3-05-016-10 (Lime Manufacture, Raw Material Storage Piles)

2. Coaxial Mixing and Pulpung (identified as Unit 8D) controlled by a baghouse (identified as EP-24):

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	45.0	2.2	434	98.7%	5.64
PM10	45.0	2.2	434	98.7%	5.64

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

Gypsum Material Handling and Product Processing (Continued)

3. *Kiln Drying*
see combustion calculations

4. *BET Board Sawing (identified as Unit 1A) controlled by a baghouse (identified as EP-25):*

Pollutant	Max. Rate (ft ² /hr)	Emission Factor (lb/ft ²)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	2,500	0.008	87.6	98.7%	1.14
PM10	2,500	0.0068	74.5	98.7%	0.97

Emission factors from FIRE, SCC#3-05-015-21 (Gypsum Manufacture, End Sawing 8 ft.)

5. *BET Dunnage Sawing (identified as Unit 1B) controlled by a baghouse (identified as EP-25):*

Pollutant	Max. Rate (ft ² /hr)	Emission Factor (lb/ft ²)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	2,500	0.008	87.6	98.7%	1.14
PM10	2,500	0.0068	74.5	98.7%	0.97

Emission factors from FIRE, SCC#3-05-015-21 (Gypsum Manufacture, End Sawing 8 ft.)

6. *BET Grindstone System (identified as Unit 1D) controlled by a baghouse (identified as EP-38):*

Pollutant	Max. Rate (ft ² /hr)	Emission Factor (lb/ft ²)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	2,500	0.008	87.6	98.7%	1.14
PM10	2,500	0.0068	74.5	98.7%	0.97

Emission factors from FIRE, SCC#3-05-015-21 (Gypsum Manufacture, End Sawing 8 ft.)

7. *BMA Land Plaster Bin (identified as Unit 8A) controlled by a baghouse (identified as EP-21):*

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	1.00	2.2	9.64	98.7%	0.13
PM10	1.00	2.2	9.64	98.7%	0.13

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

8. *Starch Bin (identified as Unit 8B) controlled by a baghouse (identified as EP-21):*

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	0.10	2.2	0.96	98.7%	0.01
PM10	0.10	2.2	0.96	98.7%	0.01

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

9. *BMA Ball Mill (identified as Unit 8C) controlled by a baghouse (identified as EP-23):*

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	1.10	2.2	10.6	98.7%	0.14
PM10	1.10	2.2	10.6	98.7%	0.14

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

Gypsum Material Handling and Product Processing (Continued)

10. *Dunnage Storage Bin (identified as Unit 1C) controlled by a baghouse (identified as EP-26):*

Pollutant	Max. Rate (ton/hr)	Emission Factor (lb/ton)	PTE Uncontrolled (tons/yr)	Control Efficiency (%)	PTE Controlled (tons/yr)
PM	1.00	2.2	9.64	98.7%	0.13
PM10	1.00	2.2	9.64	98.7%	0.13

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, SCC #3-05-016-15

I. Wallboard Crusher

A. **Crushing Operation**

Pollutant	Max. Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)
PM	34.0	0.017	2.53
PM10	34.0	0.017	2.53

Emission factors from AP-42, Chapter 11.17 (Lime Manufacturing), Table 11.17-4, Primary crusher. Assume all PM10 equals to PM emissions.

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), the source submitted a fugitive particulate matter emission control plan for the wallboard crusher on November 15, 2006. The Permittee uses a mix of wet and dry cull material to control dust (Wet Cull is material rejected prior to the kiln; Dry cull is material rejected after the kiln). By using the proper ratio, dust generated is negligible.

B. **Combustion**

see combustion calculations

J. Wallboard Grinder

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	PTE Uncontrolled (tons/yr)	PTE Uncontrolled (lbs/hr)
PM	20	0.0054	0.47	0.108
PM10	20	0.0024	0.21	0.048

Emission factors from AP-42 11.16 Gypsum Manufacturing

Methodology

PTE Uncontrolled (tons/yr) = Max. Rate (tons/yr) * Emission Factor (lbs/ton) * 8760 hours/yr * 1/2000 ton/lbs

**Appendix A: Emission Calculations
Wallboard Manufacturing Operation
VOC/HAP Emissions**

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Pit ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Wallboard Manufacturing Operation: Unlimited

Process	Maximum Throughput (tons/yr)	VOC Emission Factor (lb/ton) ¹	PTE VOC (tons/yr)	Formaldehyde Emission Factor (lb/ton) ¹	PTE Formaldehyde (tons/yr)
Regular Wallboard	433000	5.72E-02	12.39	3.84E-03	0.83
XP Wallboard ²	433000	1.90E-01	41.21	1.23E-02	2.67
Worst Case =			41.21		2.67

Wallboard Manufacturing Operation: Limited

Process	Limited Throughput (tons/yr)	VOC Emission Factor (lb/ton) ¹	PTE VOC (tons/yr)	Formaldehyde Emission Factor (lb/ton) ¹	PTE Formaldehyde (tons/yr)
Regular Wallboard	400000	5.72E-02	11.44	3.84E-03	0.77
XP Wallboard ²	75000	1.90E-01	7.13	1.23E-02	0.46
Total =			18.6		1.23

Stack Test Results:

¹VOC/HAP emission factors provided by full-scale wallboard production stack testing at Wilmington, NC facility, on September 23-25, 2008 by Pace Analytical Services, Inc.

Regular wallboard stack test VOC emission factor = 2.83 lb VOC/hr

Regular wallboard stack test HAPs emission factor = 0.19 lb Formaldehyde/hr

XP Wallboard stack test VOC emission factor = 9.41 lb VOC/hr

XP Wallboard stack test HAPs emission factor = 0.61 lb Formaldehyde/hr

Methodology

²Source has proposed to utilize a new raw material of silicone SILRES@ BS94 in the existing production of XP Wallboard.

VOC/HAPs Emission Factor (lb/ton) = Fomaldehyde Stack Test Emission Factor (lb/hr) / (Line Speed (ft/min) * Wallboard Width (ft) * Wallboard weight (lbs/1000 ft²) * 60 (min/hr) / 2,000 (lbs/ton))

VOC/HAP PTE (tons/yr) = VOC/HAPs Emission Factor (lb/ton) * Throughput (tons/yr) * 1/2000 (ton/lbs)

Change in emissions = XP Wallboard PTE - Regular Wallboard PTE

VOC/HAP emission factors have been scaled to reflect differences in maximum production capacities at the Shoals, IN and Wilmington, NC facilities.

Line speed (ft/min) = 182

Wallboard width (ft) = 4

Wallboard weight (lbs/1000 ft²) = 2263.8

Line speed, wallboard weight and width, and maximum production capacity provided by NGC Shoals, IN.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: New NGC, Inc. dba National Gypsum Co.
Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
164	1000	1436.6

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	1.4	5.5	5.5	0.4	71.8	4.0	60.3

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 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

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See following page for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: New NGC, Inc. dba National Gypsum Co.

Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581

Permit Number: F101-31237-00003

Plt ID: 101-00003

Reviewer: Sarah Street

Date: 12/13/2011

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.508E-03	8.620E-04	5.387E-02	1.293E+00	2.442E-03

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.592E-04	7.902E-04	1.006E-03	2.730E-04	1.508E-03

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See following page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Greenhouse Gas Emissions

Company Name: New NGC, Inc. dba National Gypsum Co.

Address City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581

Permit Number: F101-31237-00003

Plt ID: 101-00003

Reviewer: Sarah Street

Date: 12/13/2011

	Greenhouse Gas		
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	86,198	1.7	1.6
Summed Potential Emissions in tons/yr	86,202		
CO2e Total in tons/yr	86,723		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Company Name: New NGC, Inc. dba National Gypsum Co.
Address, City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011

Unit

Wallboard Crusher	330 HP
Fuel-oil combustion facilities	2 MMBtu/hr

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur

0.5

2.83919

177.6521743

	Pollutant						
Emission Factor in lb/kgal	PM*	PM10	direct PM2.5	SO2	NOx	VOC	CO
	2.0	2.4	2.1	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.18	0.21	0.19	6.31	1.78	0.03	0.44

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 2 for HAPs emission calculations.

**Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions**

**Company Name: New NGC, Inc. dba National Gypsum Co.
Address, City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011**

HAPs - Metals					
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	4.97E-05	3.73E-05	3.73E-05	3.73E-05	1.12E-04

HAPs - Metals (continued)				
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	3.73E-05	7.46E-05	3.73E-05	1.87E-04

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

See Page 3 for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Greenhouse Gas Emissions**

**Company Name: New NGC, Inc. dba National Gypsum Co.
Address, City IN Zip: 9720 US Highway 50, Shoals East, Indiana 47581
Permit Number: F101-31237-00003
Plt ID: 101-00003
Reviewer: Sarah Street
Date: 12/13/2011**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	21,500	0.216	0.26
Potential Emission in tons/yr	1,910	0.0	0.0
Summed Potential Emissions in tons/yr	1,910		
CO2e Total in tons/yr	1,917		

Methodology

The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Greg Berry
New NGC Inc., dba National Gypsum Co.
9720 US Highway 50 E
Shoals, IN 47581

DATE: December 29, 2011

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

SUBJECT: Final Decision
Administrative Amendment
101-31237-00003

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Marjorie Collins – ARCADIS U.S., Inc.
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 12/29/2011 New NGC Inc. dba National Gypsum Co. 101-31237-00003 Final			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Greg Berry New NGC Inc. dba National Gypsum Co. 9720 US Hwy 50 E Shoals IN 47581 (Source CAATS) via confirmed delivery									
2		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)									
3		Martin County Commissioners PO Box 600 129 S Main Street Courthouse Shoals IN 47581 (Local Official)									
4		Martin County Health Department P.O. Box 368 Shoals IN 47581-0368 (Health Department)									
5		Shoals Town Council P.O. Box 1078 Shoals IN 47581 (Local Official)									
6		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)									
7		Marjorie Collins ARCADIS U.S., Inc. 28550 Cabot Drive, Suite 500 Novi MI 48377 (Consultant)									
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