

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**National Gypsum Company  
East Maple St., Lot 8 - Lintner Industrial Park  
Rensselaer, Indiana 47978**

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

This permit is issued 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 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F073-9983-00033	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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)]

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The Permittee owns and operates a stationary gypsum wallboard related product manufacturing operation.

Responsible Official: G. P. Carroll  
Source Address: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana 47978  
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211  
SIC Code: 3275  
County Location: Jasper  
County Status: Attainment for all criteria pollutants  
Source Status: Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD

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

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

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour, and consisting of the following equipment:
  - (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading, and consisting of the following:
    - (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
    - (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
    - (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,
    - (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
    - (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
    - (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.
- (b) Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment:

- (2) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively, and
  - (3) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively.
- (c) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slitter, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

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, as defined in 326 IAC 2-7-1(21):

- (a) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour,
- (b) Closed loop heating and cooling systems,
- (c) Paved and unpaved roads and parking lots with public access, and
- (d) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separator, tanks, and fluid handling equipment.

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 Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]**

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.

### **B.2 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, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-8-4(2)]**

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-8-6]**

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

### **B.5 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.6 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.7 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.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]**

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U.S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM 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.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
- (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) 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.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.12 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. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (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, IDEM, OAM, may require to determine the compliance status of the source.

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

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.14 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 describes 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, OAM, 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 No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, 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, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance 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.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.16 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 FESOP 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)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM 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, OAM, 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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM 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).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

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, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the 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.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

B.21 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under 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  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

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

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-8-15(c)]  
The Permittee may trade increases and decreases in emissions in 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).
- (d) 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, OAM or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.22 Construction Permit Requirement [326 IAC 2]**

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Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-8-5(a)(4)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]**

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

**B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]**

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.26 Enhanced New Source Review [326 IAC 2]**

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and such facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

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

**C.1 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 from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day 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 three hundred sixty-five (365) consecutive day 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 three hundred sixty-five (365) consecutive day period.
- (b) 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.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

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

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on September 21, 1998. The plan consists of:

- (a) Fugitive particulate matter emissions from paved and unpaved roads shall be controlled by one or more of the following methods:
  - (1) Fugitive dust suppression on paved and unpaved roads will be accomplished through wet suppression and/or other means based on the service conditions at the site.
  - (2) If necessary a water truck will be employed to supply water to the working surfaces where fugitive dusts may be generated.

- (b) Fugitive particulate matter emissions from material handling shall be controlled by one or more of the following methods:
  - (1) Materials are transferred pneumatically from the silos to the mixers. The silos are controlled by baghouses that will be maintained and inspected per the manufacturer's recommendations.
  - (2) The mixers, which are located in the building, are controlled by baghouses that emit to the interior of the building. All baghouses will be subject to EPA reference method 22 for visible emissions each day that they are operated.
  - (3) Inspection and maintenance procedures recommended by the manufacturer of these baghouses will be followed and modified if needed.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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 61.140]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

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

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM, OAM.

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

#### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notify:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

#### **C.12 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### **C.13 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.14 Pressure Gauge Specifications**

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Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.

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

#### **C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation).

The ERP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, 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.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5]  
[326 IAC 1-6]

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or

- (4) The process has already returned to operating within “normal” parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]  
[326 IAC 2-8-5]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

**C.19 Monitoring Data Availability**

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- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Stratospheric Ozone Protection**

C.22 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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### SECTION D.1 FACILITY CONDITIONS

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

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour, and consisting of the following equipment:
- (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading, and consisting of the following:
- (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
- (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
- (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,
- (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
- (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
- (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.
- (b) Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment:
- (1) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively, and
- (2) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively.
- (c) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slitter, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

## **Construction Conditions [326 IAC 2-1-3.2]**

### **General Construction Conditions**

D.1.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **Effective Date of the Permit**

D.1.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.1.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **First Time Operation Permit**

D.1.5 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration & Development Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour and consisting of the following equipment:
- (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading and consisting of the following:
    - (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
    - (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
    - (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,
    - (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
    - (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
    - (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.

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

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the:

- (a) Two (2) limestone silos (ID SV1 and SV2) shall each not exceed 37.31 pounds per hour when each operating at a process weight rate of 54,000 pounds per hour (equivalent to 27 tons per hour).
- (b) One (1) plaster of paris silo (ID SV3) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 40,000 pounds per hour (equivalent to 20 tons per hour).
- (c) One (1) talc silo (ID SV4) shall not exceed 24.03 pounds per hour when operating at a process weight rate of 28,000 pounds per hour (equivalent to 14 tons per hour).
- (d) One (1) clay silo (ID SV5) shall not exceed 34.48 pounds per hour when operating at a process weight rate of 48,000 pounds per hour (equivalent to 24 tons per hour).
- (e) One (1) mica silo (ID SV6) shall not exceed 13.62 pounds per hour when operating at a process weight rate of 12,000 pounds per hour (equivalent to 6 tons per hour).
- (f) One (1) perlite silo (ID SV7) shall not exceed 13.62 pounds per hour when operating at a process weight rate of 12,000 pounds per hour (equivalent to 6 tons per hour).

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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) ready-mix joint compound and dry powder product storage facility and its control devices.

### **Compliance Determination Requirements**

#### D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.4 Particulate Matter (PM)

The baghouses for PM control shall be in operation at all times when the one (1) ready-mix joint compound and dry powder product storage facility is loading and unloading.

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

#### D.2.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) ready-mix joint compound and dry powder product storage facility, at least once weekly when the one (1) ready-mix joint compound and dry powder product storage facility is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

#### D.2.6 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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 single compartment baghouses, 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).

#### D.2.7 Visible Emissions Notations

- (a) Daily visible emission notations of the one (1) ready-mix joint compound and dry powder product storage facility 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

#### D.2.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.8, the Permittee shall maintain records of daily visible emission notations of the one (1) ready-mix joint compound and dry powder product storage facility exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (c) To document compliance with Condition D.2.5, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.

- (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (b) Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment:
- (1) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively, and
  - (2) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively.

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

##### D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification, for the two (2) ready-mix joint compound and dry powder product lines that would lead to an increase in source wide potential VOC emissions to 25 tons per year, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1 before such change can occur.

##### D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the two (2) dry additive bins (ID PL1 and PL4), two (2) receiving bins (ID PL2 and PL5), and two (2) mixers (ID PL3 and PL6), using baghouses (ID RM1 and RM2) as control, shall not exceed 27.36 pounds per hour when each operating at a process weight rate of 34,000 pounds per hour (equivalent to 17 tons per hour),

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

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

## Compliance Determination Requirements

### D.3.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

Within 6 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Method 25 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to verify the VOC flash off percentage. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

### D.3.5 Particulate Matter (PM)

The baghouses for PM control shall be in operation and venting to the inside of the building at all times when the two (2) ready-mix joint compound and dry powder product lines are in operation.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

- (c) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slitter, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

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

### D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the (1) buffer, one (1) slitter, and one (1) rewinder shall not exceed 4.1 pounds per hour when each operating at a process weight rate of 2000 pounds per hour (equivalent to 1 ton per hour),

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) joint tape process line and its control devices.

## Compliance Determination Requirements

### D.4.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### D.4.4 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the one (1) joint tape process line is in operation.

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

### **D.4.5 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) joint tape process line, at least once weekly when the one (1) joint tape process line is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

### **D.4.6 Broken or Failed Bag Detection**

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In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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 single compartment baghouses, 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).

### **D.4.7 Visible Emissions Notations**

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- (a) Daily visible emission notations of the one (1) joint tape process line 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

#### **D.4.8 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.4.1 and D.4.7, the Permittee shall maintain records of daily visible emission notations of the one (1) joint tape process line exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (c) To document compliance with Condition D.4.4, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

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

Source Name: National Gypsum Company  
Source Address: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana 47978  
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211  
FESOP No.: F073-9983-00033

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

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) \_\_\_\_\_

9 Report (specify) \_\_\_\_\_

9 Notification (specify) \_\_\_\_\_

9 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 MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

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

Source Name: National Gypsum Company  
Source Address: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana 47978  
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211  
FESOP No.: F073-9983-00033

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2
<b>9</b> 1. This is an emergency as defined in 326 IAC 2-7-1(12) CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<b>9</b> 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) CThe Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

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

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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 MANAGEMENT  
 COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: National Gypsum Company  
 Source Address: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana 47978  
 Mailing Address: 2001 Rexford Road, Charlotte, NC 28211  
 FESOP No.: F073-9983-00033

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) and Enhanced New Source Review (ENSR)

#### Source Background and Description

Source Name: National Gypsum Company  
Source Location: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana  
47978  
County: Jasper  
SIC Code: 3275  
Operation Permit No.: F073-9983-00033  
Permit Reviewer: Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from National Gypsum Company relating to the construction and operation of a stationary gypsum wallboard related product manufacturing operation.

#### Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units at this source.

#### Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

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

#### New Emission Units and Pollution Control Equipment Requiring ENSR

The application includes information relating to the construction and operation of the following equipment:

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour, and consisting of the following equipment:
  - (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading, and consisting of the following:
    - (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
    - (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
    - (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,

- (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
  - (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
  - (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.
- (b) Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment:
- (1) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively, and
  - (2) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively.
- (c) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slitter, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour,
- (b) Closed loop heating and cooling systems,
- (c) Paved and unpaved roads and parking lots with public access, and
- (d) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separator, tanks, and fluid handling equipment.

### **Recommendation**

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

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

An administratively complete FESOP application for the purposes of this review was received on July 29, 1998, with additional information received on August 17, 1998.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (2 pages).

**Potential Emissions**

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	1381.58
PM-10	1381.58
SO <sub>2</sub>	--
VOC	8.28
CO	--
NO <sub>x</sub>	--

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Vinyl Acetate	1.15
Acetaldehyde	0.12
Ethylene Glycol	0.59
Formaldehyde	0.19
TOTAL	2.05

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM-10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**Limited Potential to Emit**

- (a) The source has accepted a federally enforceable limit on potential to emit PM-10 less than 99 tons per year. Sourcewide PM-10 emissions are controlled at 13.8 tons per year, with negligible emissions from the insignificant activities.
- (b) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

Process/facility	Limited Potential to Emit (tons/year)							
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	Single HAP
Seven (7) storage silos (ID SV1 thru SV7)	9.91	9.91	--	--	--	--	--	--
one (1) dry additive bin (ID PL 1), one (1) receiving bin (ID PL 2), and one (1) mixer (ID PL 3)	1.80	1.80	--	4.14	--	--	1.25	0.58
one (1) dry additive bin (ID PL 4), one (1) receiving bin (ID PL 5), and one (1) mixer (ID PL 6)	1.80	1.80	--	4.14	--	--	1.25	0.58
One (1) Joint Tape Process line (ID SV8)	0.30	0.30	--	--	--	--	--	--
Insignificant Activities	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Total Emissions	13.81	13.81	--	8.28	--	--	2.05	1.15

**County Attainment Status**

The source is located in Jasper County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Jasper County has been designated as attainment or unclassifiable for ozone.

**Federal Rule Applicability**

- (a) The two (2) dry additive bins (ID PL1 and PL4) and two (2) receiving bins (ID PL2 and PL5) are not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO, because this plant does not crush or grind nonmetallic minerals.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, applicable to this source.

### **State Rule Applicability - Entire Source**

#### 326 IAC 2-1-3.4 (New Source Toxics Control)

326 IAC 2-1-3.4 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per year and total HAPs equal to or greater than twenty-five (25) tons per year. Since this source has the potential to emit any single HAP and total HAPs at levels less than 10 tons per year and 25 tons per year, respectively, the requirements of 326 IAC 2-1-3.4 do not apply.

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

This source is not a major source under 326 IAC 2-2 (PSD) because the potential to emit for any regulated pollutant is less than 250 tons per year, and it is not one of the twenty-eight (28) listed sources.

#### 326 IAC 2-6 (Emission Reporting)

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

#### 326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the source will limit sourcewide PM10 to emissions to less than 100 tons per year. The limitation will render 326 IAC 2-7 (Part 70 Permit Program) not applicable.

#### 326 IAC 5-1 (Visible Emissions Limitations)

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

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Fugitive dust from the additive bins (PL1 and PL4), receiving bin (ID PL2 and PL5) or mixer (ID PL3 and PL6) operations shall not be seen crossing the property line of the source at or near ground level.

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

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes the following:

- (a) Fugitive particulate matter emissions from paved and unpaved roads shall be controlled by one or more of the following methods:
  - (1) Fugitive dust suppression on paved and unpaved roads will be accomplished through wet suppression and/or other means based on the service conditions at the site.
  - (2) If necessary a water truck will be employed to supply water to the working surfaces where fugitive dusts may be generated.

- (b) Fugitive particulate matter emissions from material handling shall be controlled by one or more of the following methods:
- (1) Materials are transferred pneumatically from the silos to the mixers. The silos are controlled by baghouses that will be maintained and inspected per the manufacturer's recommendations.
  - (2) The mixers, which are located in the building, are controlled by baghouses that emit to the interior of the building. All baghouses will be subject to EPA reference method 22 for visible emissions each day that they are operated.
  - (3) Inspection and maintenance procedures recommended by the manufacturer of these baghouses will be followed and modified if needed.

**State Rule Applicability - Individual Facilities**

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), the particulate matter (PM) emissions from:

- (a) the one (1) ready-mix joint compound and dry powder product storage facility and the one (1) joint tape process line shall be limited by the following:

Interpolation and extrapolation 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:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of allowable emissions in pounds per hour; and}$$

$$P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency %	Controlled PM Emissions (lb/hr)
two (2) limestone silos (ID SV 1 and SV2)	27.00	37.31	10.29	99.00%	0.10
one (1) plaster of paris silo (ID SV3)	20.00	30.51	41.10	99.00%	0.41
one (1) talc silo (ID SV4)	14.00	24.03	41.10	99.00%	0.41
one (1) clay silo (ID SV5)	24.00	34.48	41.10	99.00%	0.41
one (1) mica silo (ID SV 6)	6.00	13.62	41.10	99.00%	0.41
one (1) perlite silo (ID SV 7)	6.00	13.62	41.10	99.00%	0.41
two (2) ready-mix joint compound and dry powder product lines	17.00	27.36	41.10	99.00%	0.41
one (1) joint tape process line	1.00	4.10	6.86	99.00%	0.07

The baghouses for the plaster of paris silo (ID SV3), talc silo (ID SV4), clay silo (ID SV5), mica silo (ID SV 6), perlite silo (ID SV 7), and the one (1) joint tape process line shall be in operation at all times when these facilities are in operation, in order to comply with 326 IAC 6-3-2.

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

Pursuant to 326 IAC 8-1-6 (New Facilities General Reduction Requirements), new facilities which have potential VOC emissions of 25 tons or more per year, located anywhere in the state, and which are not otherwise regulated by other provisions of this article (326 IAC 8), shall reduce VOC emissions using best available control technology (BACT). The two (2) mixers (PL5 and PL6) have VOC emissions of less than 25 tons per year (see page 4 of 5, TSD App. A), therefore, the requirements of 326 IAC 8-1-6 do not apply.

**326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)**

The source is not applicable to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) because all VOC storage vessels at the source have capacities less than 39,000 gallons.

**Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

- (1) The one (1) ready-mix joint compound and dry powder product storage facility has applicable compliance monitoring conditions as specified below:
  - (a) The baghouses for PM control shall be in operation at all times when the one (1) ready-mix joint compound and dry powder product storage facility is in operation.
  - (b) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) ready-mix joint compound and dry powder product storage facility, at least once weekly when the one (1) ready-mix joint compound and dry powder product storage facility is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (d) An inspection shall be performed each calendar quarter of all bags controlling the one (1) ready-mix joint compound and dry powder product storage facility operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (e) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (f) Daily visible emission notations of the one (1) ready-mix joint compound and dry powder product storage facility exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring requirements are necessary because the baghouses for the one (1) ready-mix joint compound and dry powder product storage facility must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-8 (Federally Enforceable State Operating Permit Program), and also to ensure that the requirements of 326 IAC 2-7 (Title V) do not apply.

- (2) The two (2) ready-mix joint compound and dry powder product lines has applicable compliance monitoring conditions as specified below:
  - (a) The baghouses for PM control shall be in operation at all times when the two (2) ready-mix joint compound and dry powder product lines are in operation.
  - (b) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the two (2) ready-mix joint compound and dry powder product lines, at least once weekly when the two (2) ready-mix joint compound and dry powder product lines are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained

within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (d) An inspection shall be performed each calendar quarter of all bags controlling the two (2) ready-mix joint compound and dry powder product lines operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (e) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (f) Daily visible emission notations of the two (2) ready-mix joint compound and dry powder product lines exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring requirements are necessary to ensure that the requirements of 326 IAC 2-7 (Title V) do not apply, and to ensure compliance with 326 IAC 2-8 (Federally Enforceable State Operating Permit Program).

- (3) The one (1) joint tape process line has applicable compliance monitoring conditions as specified below:
  - (a) The baghouse for PM control shall be in operation at all times when the one (1) joint tape process line is in operation.

- (b) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) joint tape process line, at least once weekly when the one (1) joint tape process line is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (d) An inspection shall be performed each calendar quarter of all bags controlling the one (1) joint tape process line operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (e) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (f) Daily visible emission notations of the one (1) joint tape process line shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring requirements are necessary to ensure that the requirements of 326 IAC 2-7 (Title V) do not apply, and to ensure compliance with 326 IAC 2-8 (Federally Enforceable State Operating Permit Program) and 326 IAC 6-3-2 (Particulate Emissions Limitations).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

### **Conclusion**

The operation of this gypsum wallboard related product operation shall be subject to the conditions of the attached proposed **FESOP No. F 073-9983-00033**.

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

Addendum to the  
Technical Support Document for Federally Enforceable State Operating  
Permit (FESOP)  
and Enhanced New Source Review (ENSR)

**Source Name:** National Gypsum Company  
**Source Location:** East Maple St., Lot 8 - Lintner Industrial Park,  
Rensselaer, Indiana 47978  
**SIC Code:** 3275  
**County:** Jasper  
**Operation Permit No.:** F073-9983-00033  
**Permit Reviewer:** Phillip Ritz / EVP

On October 17, 1998, the Office of Air Management (OAM) had a notice published in the Rensselaer Republican, Rensselaer, Indiana, stating that National Gypsum Company had applied for a Federally Enforceable State Operating Permit (FESOP) and Enhanced New Source Review (ENSR) to construct and operate a stationary gypsum wallboard related product manufacturing operation. The notice also stated that OAM proposed to issue a FESOP and ENSR for this operation and provided information on how the public could review the proposed FESOP, ENSR and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP and ENSR should be issued as proposed.

On November 11, 1998, Mr. Yin-Pong Chang submitted comments on behalf of National Gypsum Company. The summary of the comments and corresponding responses is as follows:

**Comment #1**

*On page no. 30 of 41, Condition D.2.8, "Visible Emission Notations", National Gypsum Company firmly believes the requirement for "daily" visible emissions notations of the one ready-mix joint compound and dry product storage facility exhaust is unnecessary and overly burdensome. As explained in our permit application, the product storage facility including seven storage silos will probably be operated on a once or twice per week basis, certainly not on a daily basis. Furthermore, all of these emissions sources are equipped with baghouse (>99.99% control efficiency) type controls, and are designed to be operated with no visible emissions. Therefore, National Gypsum Company requests that the daily visible emissions notations be either completely deleted, or revised to weekly visible emissions notations.*

### **Response #1**

The visible emission notations are used to indicate compliance with 326 IAC 5-1 and 326 IAC 6, without the requirement to have a person on site trained in opacity measurement. This requirement is designed as a trigger that the source perform some corrective action on the facility if visible emissions are abnormal, to ensure continuous compliance with emission limitations. These gypsum wallboard related product manufacturing operations do require the baghouses to stay in compliance. Therefore, the visible emission observations are required. Condition C. Monitoring Data Availability states: when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit. Because of this indication, the daily visible emissions notations required by Condition D.2.8, on page 30 of 41 of the proposed permit, will not be changed, and the source should simply keep records that indicate the result of the daily visible emissions or that the silos are not operating.

### **Comment #2**

*On page 32 of 41, Condition D.3.4, "Testing Requirements", National Gypsum Company firmly believes the requirement for testing VOC emissions or verification of the VOC flash off percentage is unnecessary and overly burdensome. The ready mix joint compound and dry powder product lines are created via a simple mixing operation rather than a chemical reaction process. Negligible or no VOC emissions result from this process. Therefore, National Gypsum Company requests that the VOC emissions testing requirement be completely deleted.*

### **Response #2**

VOC emissions from the mixing operation at the source were determined to be not subject to the requirements of 326 IAC 8-1-6, based on a VOC flash off percentage of 5% provided by the source. To confirm the VOC flash off percentage from the mixing operation to be no more than the 5%, a performance test is required as there are no other sources (including AP-42) for emission estimations for ready mix joint compound and dry powder product lines. There were no changes to the proposed permit due to this comment.

Upon further review, the OAM has decided to incorporate the following revisions into FESOP F073-9983-00033. (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The Table Of Contents has been modified to reflect these changes:

- (a) The following changes have been made to Condition D.3.4 (changes indicated in bold face or strikeout):

#### **D.3.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]**

~~During the period between 24 and 36~~ **Within 6** months after issuance of this permit, the Permittee shall perform VOC testing utilizing Method 25 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to verify the VOC flash off percentage. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- (b) The OAM has determined that performing parametric monitoring (recording pressure drop readings) for the baghouses controlling the one (1) ready-mix joint compound and dry powder product storage facility and one (1) Joint Tape Process line without conducting the baghouse inspections shall be sufficient to ensure the baghouse are being operated properly. Therefore, conditions D.2.6 and D.4.6 have been removed (changes indicated in bold face or strikeout):

~~D.2.6 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the one (1) ready-mix joint compound and dry powder product storage facility operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

~~D.4.6 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the one (1) joint tape process line operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

- (c) The baghouses listed in Section D.3 shall always vent the exhaust gas inside the building. For facilities venting inside the building, it is not necessary to conduct compliance monitoring. Therefore, Conditions D.3.5 through D.3.10 were revised as follows:

~~D.3.5 Particulate Matter (PM)~~

~~The baghouses for PM control shall be in operation **and venting to the inside of the building** at all times when the two (2) ready-mix joint compound and dry powder product lines are in operation.~~

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

~~D.3.6 Parametric Monitoring~~

~~The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the two (2) ready-mix joint compound and dry powder product lines, at least once weekly when the two (2) ready-mix joint compound and dry powder product lines are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~

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

#### ~~D.3.7 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the two (2) ready-mix joint compound and dry powder product lines operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

#### ~~D.3.8 Broken Bag or Failure Detection~~

~~In the event that bag failure has been observed:~~

- ~~(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~
- ~~(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~

#### ~~D.3.9 Visible Emissions Notations~~

- ~~(a) Daily visible emission notations of the two (2) ready-mix joint compound and dry powder product lines 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~

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

#### ~~D.3.10 Record Keeping Requirements~~

- ~~(a) To document compliance with Conditions D.3.2 and D.3.9, the Permittee shall maintain records of daily visible emission notations of the two (2) ready-mix joint compound and dry powder product lines exhaust.~~

- ~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~
- ~~(c) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
  - ~~(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - ~~(A) Inlet and outlet differential static pressure; and~~
    - ~~(B) Cleaning cycle: frequency and differential pressure.~~~~
  - ~~(2) Documentation of all response steps implemented, per event.~~
  - ~~(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.~~
  - ~~(4) Quality Assurance/Quality Control (QA/QC) procedures.~~
  - ~~(5) Operator standard operating procedures (SOP).~~
  - ~~(6) Manufacturer's specifications or its equivalent.~~
  - ~~(7) Equipment "troubleshooting" contingency plan.~~
  - ~~(8) Documentation of the dates vents are redirected.~~~~
- ~~(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~
- (d) Condition D.4.2 (Preventive Maintenance Plan), for the one (1) joint tape process line has been added to Section D.4, and the other conditions have been renumbered (changes indicated in bold face or strikeout):

**D.4.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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**A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) joint tape process line and its control devices.**

- (e) On pages 8 and 10 of 11, of the Technical Support Document under Compliance Requirements (1)(d) and (3)(d), the language has been changed as the source has requested parametric monitoring for its baghouses. This monitoring requirement will satisfy the Compliance Monitoring requirements for the one (1) ready-mix joint compound and dry powder product storage facility and one (1) Joint Tape Process line. Therefore, baghouse inspections are not necessary and shall be removed. The following changes have been made (changes indicated in bold face or strikeout):

~~(1)(d) An inspection shall be performed each calendar quarter of all bags controlling the one (1) ready-mix joint compound and dry powder product storage facility operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

and,

~~(3)(d) An inspection shall be performed each calendar quarter of all bags controlling the one (1) ready-mix joint compound and dry powder product storage facility operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

- (f) Condition D.2.7, on page 29 of 41, and Condition D.4.6, on page 36 of 41, (Broken Bag or Failure Detection), for the one (1) ready-mix joint compound and dry powder product storage facility and the one (1) joint tape process line have been revised (changes indicated in bold face or strikeout):

#### D.2.7 Broken or Failed Bag or Failure Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, 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).**

#### D.4.6 Broken or Failed Bag or Failure Detection

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In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, 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).**
- (g) On page 9 of 11, of the Technical Support Document under Compliance Requirements (2), the language has been changed as this facility will always vent to the interior of the building. Since the Compliance Monitoring is required only "when venting to the atmosphere" the requirements for performing Compliance Monitoring have been removed. The revisions to the section are as follows:  
The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

- (2) The two (2) ready-mix joint compound and dry powder product lines has applicable compliance monitoring conditions as specified below:
- (a) The baghouses for PM control shall be in operation **and venting to the inside of the building** at all times when the two (2) ready-mix joint compound and dry powder product lines are in operation.
  - ~~(b) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the two (2) ready-mix joint compound and dry powder product lines, at least once weekly when the two (2) ready-mix joint compound and dry powder product lines are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~
  - ~~(c) The instrument used for determining the pressure shall comply with Section C Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.~~
  - ~~(d) An inspection shall be performed each calendar quarter of all bags controlling the two (2) ready-mix joint compound and dry powder product lines operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~
  - ~~(e) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~

~~(f) Daily visible emission notations of the two (2) ready-mix joint compound and dry powder product lines exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~

- (h) On pages 9 and 10 of 11, of the Technical Support Document under Compliance Requirements (1)(e) and (3)(e) [now (1)(d) and (3)(d)], the language has been changed as the Broken Bag or Failure Detection language has been revised for the one (1) ready-mix joint compound and dry powder product storage facility and the one (1) joint tape process line (changes indicated in bold face or strikeout):

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

- (1) ~~(e)~~(d) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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).** ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. For single compartment baghouses, 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).~~
- (3) ~~(e)~~(d) In the event that bag failure has been observed the affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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).** ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. For single compartment baghouses, 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).~~

**Total Source Emissions**  
**Appendix A: Emission Calculations**

**Company Name:** National Gypsum Company  
**Address City IN Zip:** East Maple Street, Lot 8 - Lintner Industrial Park, Rensselaer, IN 28211  
**CP:** 073-9983  
**Plt ID:** 073-00033  
**Reviewer:** PR/EVP  
**Date:** 7/29/98

**Potential Uncontrolled Emissions (tons/year)**

Pollutant	Emissions Generating Activity				<b>TOTAL</b> tons per year
	Ready Mix VOC emissions tons per year	Ready Mix/Dry P. PM emissions tons per year	Ready Mix HAP Emission tons per year	Silo and Joint Tape PM emissions tons per year	
PM	0.00	360.41	0.00	1,021.17	1,381.58
PM10	0.00	360.41	0.00	1,021.17	1,381.58
SO2	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00
VOC	8.28	0.00	0.00	0.00	8.28
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	2.05	0.00	2.05
worst case single HAP	0.00	0.00	1.15	0.00	1.15

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

**Controlled Emissions (tons/year)**

Pollutant	Emissions Generating Activity				<b>TOTAL</b> tons per year
	Ready Mix VOC tons per year	Ready Mix/Dry P. PM emissions tons per year	Ready Mix HAP Emission tons per year	Silo and Joint Tape PM emissions tons per year	
PM	0.00	3.60	0.00	10.21	13.81
PM10	0.00	3.60	0.00	10.21	13.81
SO2	0.00	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00	0.00
VOC	13.56	0.00	0.00	0.00	13.56
CO	0.00	0.00	0.00	0.00	0.00
total HAPs	0.00	0.00	2.05	0.00	2.05
worst case single HAP	0.00	0.00	1.15	0.00	1.15

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

**Appendix A: Process Particulate Emissions from Ready-Mix Joint Compound and Dry Powder Product Lines**

**Company Name:** National Gypsum Company  
**Address City IN Zip:** East Maple Street, Lot 8 - Lintner Industrial Park, Rensselaer, IN 28211  
**CP:** 073-9983  
**Plt ID:** 073-00033  
**Reviewer:** PR/EVP  
**Date:** 7/29/98

<b>Uncontrolled Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Total (tons/year*)
Dry Additive Bin, Receiving Bin, Mixer	1	0.04000	1200.0	99.00%	180.21
Dry Additive Bin, Receiving Bin, Mixer	1	0.04000	1200.0	99.00%	180.21
Total Emissions Based on Rated Capacity at 8,760 Hours/Year					<b>360.41</b>
<b>Controlled Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Total (tons/year*)
Dry Additive Bin, Receiving Bin, Mixer	1	0.04000	1200.0	99.00%	1.80
Dry Additive Bin, Receiving Bin, Mixer	1	0.04000	1200.0	99.00%	1.80
Total Emissions Based on Rated Capacity at 8,760 Hours/Year					<b>3.60</b>

Uncontrolled:

Baghouse (tons/year\*) = No. Units \* Loading (grains/ascf) \* Gas or Air Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \*(1/(1-Control Efficiency))

Controlled:

Baghouse (tons/year\*) = No. Units \* Loading (grains/ascf) \* Gas or Air Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs  
 Baghouse control efficiency based on data supplied by the applicant.

### HAP Emission Calculations

**Company Name:** National Gypsum Company  
**Address City IN Zip:** East Maple Street, Lot 8 - Lintner Industrial Park, Rensselaer, IN 28211  
**CP:** 073-9983  
**Plt ID:** 073-00033  
**Reviewer:** PR/EVP  
**Date:** 7/29/98

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-Off Percentage	Weight % Vinyl Acetate	Weight % Formaldehyde	Weight % Acetaldehyde	Weight % Ethylene Glycol	Vinyl Acetate Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Acetaldehyde Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)
Confidential Information -1	10.01	175.45	1.00	5.00%	0.30%	0.05%	0.03%	0.00%	1.15	0.19	0.12	0.00
Confidential Information -2	9.33	143.5	1.00	5.00%	0.00%	0.00%	0.00%	0.20%	0.00	0.00	0.00	0.59

Total State Potential Emissions 1.15      0.19      0.12      0.59

Total HAP Potential Emissions 2.05

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs\*flash-off percentage  
 Liquid mixing agents are confidential information.  
 Flash-off percentage based on information determined by the applicant.

**Appendix A: Emission Calculations  
VOC and Particulate  
From Ready Mix line**

**Company Name:** National Gypsum Company  
**Address City IN Zip:** East Maple Street, Lot 8 - Lintner Industrial Park, Rensselaer, IN 28211  
**CP:** 073-9983  
**Pit ID:** 073-00033  
**Reviewer:** PR/EVP  
**Date:** 7/29/98

State Potential Emissions (uncontrolled):																			
Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-off Percentage	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	
Confidential Information -1	Ready-Mix	10.01	40.00%	38.00%	2.00%	45.58%	0.00%	175.45	1.00	5.00%	0.4	0.20	1.76	42.15	7.69	0.00	ERR	100.00%	
Confidential Information -2	Ready-Mix	9.33	0.20%	0.00%	0.20%	0.00%	0.00%	143.5	1.00	5.00%	0.0	0.02	0.13	3.21	0.59	0.00	ERR	100.00%	
<b>Total State Potential Emissions:</b>													<b>1.89</b>	<b>45.36</b>	<b>8.28</b>	<b>0.00</b>			
Federal Potential Emissions (controlled):																			
												Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr		
												VOC	PM						
<b>Total Federal Potential Emissions:</b>												0.00%	95.00%	1.89	45.36	8.28	0.00		

**Methodology:**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* flash-off percentage

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day) \* flash off percentage

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs) \* flash-off percentage

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids) \* Transfer Efficiency

Total = Worst Coating + Sum of all solvents used

Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)

Liquid Mix agents are confidential information.

**Appendix A: Process Particulate Emissions from Silo and Joint Tape Process Baghouses**

**Company Name:** National Gypsum Company  
**Address City IN Zip:** East Maple Street, Lot 8 - Lintner Industrial Park, Rensselaer, IN 28211  
**CP:** 073-9983  
**Plt ID:** 073-00033  
**Reviewer:** PR/EVP  
**Date:** 7/29/98

<b>Uncontrolled Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Total (tons/year*)
Silo 1 and 2	2	0.00400	3000.0	99.00%	90.10
Silos 3 through 7	5	0.04000	1200.0	99.00%	901.03
Silo 8	1	0.00100	8000.0	99.00%	30.03
Total Emissions Based on Rated Capacity at 8,760 Hours/Year					<b>1,021.17</b>
<b>Controlled Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Total (tons/year*)
Silo 1 and 2	2	0.00400	3000.0	99.00%	0.90
Silos 3 through 7	5	0.04000	1200.0	99.00%	9.01
Silo 8	1	0.00100	8000.0	99.00%	0.30
Total Emissions Based on Rated Capacity at 8,760 Hours/Year					<b>10.21</b>

Uncontrolled:

Baghouse (tons/year\*) = No. Units \* Loading (grains/ascf) \* Gas or Air Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* (1/(1-Control Efficiency))

Controlled:

Baghouse (tons/year\*) = No. Units \* Loading (grains/ascf) \* Gas or Air Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs

Baghouse control efficiency based on data supplied by the applicant.

Silo 1 = Limestone

Silo 2 = Limestone

Silo 3 = Plaster of Paris

Silo 4 = Talc

Silo 5 = Clay

Silo 6 = Mica

Silo 7 = Perlite

Silo 8 = Joint Tape