



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: January 15, 2009
RE: U.S. Gypsum Company / 101-17814-00001
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

U.S. Gypsum Company
12802 Deep Cut Lake Road
Shoals, Indiana 47581

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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.

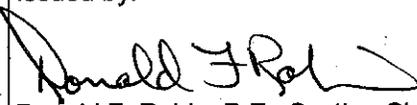
Operation Permit No.: T101-17814-00001	
Issued by:  Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: January 15, 2009 Expiration Date: January 15, 2014

TABLE OF CONTENTS

A.	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B.	GENERAL CONDITIONS.....	17
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-7-7] [IC 13-17-12]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]	
B.14	Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]	
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]	
B.17	Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.18	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.19	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.20	Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]	
B.21	Source Modification Requirement [326 IAC 2-7-10.5]	
B.22	Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.23	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.24	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.25	Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]	
B.26	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]	
C.	SOURCE OPERATION CONDITIONS.....	28
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
[326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

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

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

C.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]
[326 IAC 2-6]

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 EMISSIONS UNIT OPERATION CONDITIONS - Mining, Storage, and Bulk Rock Loading Facilities 35

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

D.1.2 Particulate Matter Limitations for Manufacturing Processes [326 IAC 6-3-2]

D.1.3 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

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

D.1.4 Visible Emission Notations

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

D.1.5 Record Keeping Requirements

D.2 EMISSIONS UNIT OPERATION CONDITIONS - Rock Dryer, Glass Batch, Landplaster, Stucco, Plaster, Stucco Handling & Storage, #1 Wallboard, #2 Wallboard, Dunnage Machine, and Synthetic Gypsum & Wallboard Waste Reclamation Facilities 38

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limits and HAP Minor Limit [326 IAC 2-2][326 IAC 20][40 CFR 63]

D.2.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

D.2.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2]

D.2.4 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6 (1),(6)][326 IAC 2-1.1-11]

D.2.6 Sulfur Dioxide (SO₂)

- D.2.7 Particulate Control (Baghouse)
- D.2.8 Particulate Control (Cyclone)

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

- D.2.9 Visible Emission Notations [40 CFR 64]
- D.2.10 Parametric Monitoring [40 CFR 64]
- D.2.11 Broken or Failed Bag Detection [40 CFR 64]
- D.2.12 Cyclone Failure Detection [40 CFR 64]

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

- D.2.13 Record Keeping Requirements
- D.2.14 Reporting Requirements

E.1 EMISSIONS UNIT OPERATION CONDITIONS - New Source Performance Standards for Nonmetallic Mineral Processing [40 CFR 60, Subpart OOO]..... 57

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

- E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.1.2 New Source Performance Standard for Nonmetallic Mineral Processing Requirements [40 CFR Part 60, Subpart OOO]

E.2 EMISSIONS UNIT OPERATION CONDITIONS - New Source Performance Standards for Calciners and Dryers in Mineral Industries [40 CFR 60, Subpart UUU] 60

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

- E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.1.2 New Source Performance Standard for Calciners and Dryers in Mineral Industries Requirements [40 CFR Part 60, Subpart UUU]

Certification 61
Emergency Occurrence Report 62
Semi-Annual Natural Gas Fired Boiler Certification..... 64
Quarterly Report..... 65
Quarterly Deviation and Compliance Monitoring Report..... 67

- Attachment A - New Source Performance Standards for Nonmetallic Mineral Processing**
- Attachment B - New Source Performance Standards for Calciners and Dryers in Mineral Industries**
- Attachment C - Fugitive Dust Control Plan**

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary gypsum mining operation and gypsum wallboard and plaster products manufacturing plant.

Source Address:	12802 Deep Cut Lake Road, Shoals, Indiana 47581
Mailing Address:	P.O. Box 1377, Shoals, Indiana 47581
General Source Phone Number:	(812)247-4115
SIC Code:	1499 and 3275
County Location:	Martin
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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

- (1) The following gypsum ore mining and storage facilities:
 - (a) One (1) primary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting inside the mine.
 - (b) One (1) mine shaft conveyor, constructed in 1955, used to convey gypsum ore from the mine to the surface, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
 - (c) One (1) secondary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting inside the crusher building.
 - (d) Two (2) ore storage silos and (1) #1 Rock Belt, constructed in 1955, each bin with a capacity of 500 tons, a maximum throughput on the #1 Rock Belt of 250 tons per hour and a nominal throughput of 100 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) Stacker Belt, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 40 tons per hour due to downstream

- bottlenecking, (1) Ore storage pile, with a storage area of 3.75 acres, with a semicircular partial enclosure, and with particulate matter emissions exhausting to the atmosphere.
- (f) One (1) #2 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (2) The following bulk rock loading facilities:
- (a) One (1) #3 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (b) One (1) rock ore screen, constructed in 1955, with a nominal throughput of 140 tons per hour, and with particulate matter emissions exhausting inside the building.
- (c) One (1) crusher, constructed in 1955, with a maximum throughput of 110 tons per hour, and with particulate matter emissions exhausting inside the building.
- (d) One (1) #4 Rock Belt, with a maximum throughput of 140 tons per hour, one (1) bulk rock storage silo, constructed in 1955, with a maximum capacity of 375 tons, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (e) One (1) #5 Rock Belt, Cement Rock Loading, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (3) The following rotary rock dryer facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 90 tons per hour, consisting of belt, screw, and bucket elevators, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
- (b) One (1) dryer feed bin, constructed in 1955, with a maximum capacity of 60 tons, with maximum throughput of 90 tons per hour, and with particulate matter emissions exhausting inside the building.
- (c) One (1) natural gas or fuel oil-fired rotary rock dryer, constructed in 1955, with a heat input capacity of 14 million Btu per hour, with a maximum throughput of 90 tons per hour, with particulate matter emissions controlled by the Rock Dryer Dust Collector, identified as emission points 10, and exhausting to one (1) stack, identified as S-10.
- (4) The following glass batch production facilities:
- (a) A conveying system, constructed in 1966, consisting of screw conveyors, with a maximum throughput of 10 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
- (b) One (1) screening operation, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch

- System Dust Collector, identified as emission point 13, and exhausting to one (1) stack, identified as S-13.
- (c) One (1) glass batch belt and storage bin, constructed in 1966, with a maximum throughput of 10 tons per hour, with a bin capacity of 85 tons, and with particulate matter emissions exhausting directly to the atmosphere.
 - (d) One Glass Batch Loading Station, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) glass batch separator, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch System Dust Collector, identified as emissions point 13, and exhausting to one (1) stack, identified as S-13.
 - (f) One (1) glass batch packing system, constructed in 1966 and modified in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
 - (g) One (1) glass batch airveyor receiving bin, constructed in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Glass Batch Receiving Bin Dust Collector, identified as emission point 40, and exhausting to one (1) stack, identified as S-40. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (5) The following landplaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 80 tons per hour, consisting of screw conveyors, with particulate matter emissions controlled by two (2) baghouses, identified as the #1 / #2 Raymond Mill Dust Collector and the #3 / #4 Raymond Mill Dust Collector, also identified as emission points 11 and 12, and exhausting to two (2) stacks, identified as S-11 and S-12, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #1, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (c) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #1, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, and with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (d) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #2, with a nominal throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.

- (e) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #2, with a maximum capacity of 150 tons, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (f) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #3, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (g) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #3, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (h) One (1) Raymond grinding mill, constructed in 1980, identified as Raymond Mill #4, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (i) One (1) Raymond Mill feed bin, constructed in 1980, identified as Raymond Feed Bin #4, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (j) One (1) Board Plant HRA landplaster receiving bin, constructed in 1986, with a capacity of 5 tons, with a maximum throughput of 2 tons per hour, with particulate matter emissions controlled by the HRA L.P. Air Conveyor Receiver Dust Collector, identified as emissions point 36, and exhausting to one (1) stack, identified as S-36. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (6) The following stucco production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 101.7 tons/hr, consisting of screw conveyors, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) calcining kettle, identified as MBR Kettle #1, constructed in 1999, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (c) One (1) kettle feed bin, identified as #1 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emission point 1, and exhausting to one (1) stack, identified as S-1.
 - (d) Three (3) natural gas or fuel oil-fired kettle burners, constructed in 1999, identified as #1 Kettle Burners, with a heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-41. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.

- (e) One (1) hot pit, constructed in 1955 and modified in 1999, identified as Hot Pit #1, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1.
- (f) One (1) calcining kettle, identified as Kettle #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (g) One (1) kettle feed bin, identified as #2 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, and with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (h) One (1) natural gas or fuel oil-fired kettle burner, constructed in 1955, identified as #2 Kettle Burner, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-42.
- (i) One (1) hot pit, identified as Hot Pit #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (j) One (1) calcining kettle, identified as Kettle #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emissions point 3, and exhausting to one (1) stack, identified as S-3.
- (k) One (1) kettle feed bin, identified as #3 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emission point 3, and exhausting to one (1) stack, identified as S-3.
- (l) One (1) natural gas or fuel oil-fired kettle burner, identified as #3 Kettle Burner, constructed in 1955, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-43.
- (m) One (1) hot pit, identified as Hot Pit #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emissions point 3, and exhausting to one (1) stack, identified as S-3.
- (n) One (1) calcining kettle, identified as Kettle #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (o) One (1) kettle feed bin, identified as #4 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.

- (p) Two (2) natural gas or fuel oil-fired kettle burners, identified as #4 Kettle Burners, constructed in 1955, with a combined heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-44.
 - (q) One (1) hot pit, identified as Hot Pit #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
 - (r) One (1) calcining kettle, identified as Kettle #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Kettle Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.
 - (s) One (1) Kettle Feed Bin, identified as #5 Kettle Feed Bin, constructed in 1986, with a maximum capacity of 125 tons, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emission point 35, and exhausting to one (1) stack, identified as S-35. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (t) One (1) natural gas or fuel oil-fired kettle burner, identified as #5 Kettle Burner, constructed in 1986, with a heat input capacity of 20 million Btu per hour, and exhausting to one (1) stack, identified as S-5.
 - (u) One (1) hot pit, identified as Hot Pit #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by enclosure, and by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.
- (7) The following plaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 9 tons per hour, consisting of screw and belt conveyors and bucket elevator, with particulate matter emissions controlled by three (3) baghouses, identified as the B-Belt Dust Collector (emissions point 17), the Tail End of D-Belt Dust Collector (emission point 25), and the Plaster Packing Dust Collector (emission point 30), and exhausting to three (3) stacks, identified as S-17, S-25 and S-30, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) tube mill feed bin, constructed in 1955 and modified in 2001, with a maximum capacity of 60 tons, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) tube mill, constructed in 1955 and modified in 2001, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Tube Mill Dust Collector, identified as emissions point 14, and exhausting to one (1) stack, identified as S-14. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) Two (2) stucco storage bins, #0 North and #0 South Stucco Bins, constructed in 1955, each with a maximum capacity of 70 tons, each with a maximum

throughput of 20 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as the #0 North Stucco Storage Bin Dust Collector (emissions point 18), and the #0 South Stucco Storage Bin Dust Collector (emission point 19), and exhausting to two (2) stacks, identified as S-18 and S-19.

- (e) One (1) stucco storage bin, #1 Stucco Bin, constructed in 1955, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Stucco Storage Bin Dust Collector, identified as emissions point 20, and exhausting to one (1) stack, identified as S-20.
- (f) One (1) sand bulk loading bin, constructed in 1996, with a maximum capacity of 60 tons, with a nominal throughput of 12 tons per hour, with particulate matter emissions controlled by Bulk Sand Bin Vent Dust Collector, identified as emissions point 51, and each exhausting to one (1) stack, identified as S-55. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (g) One (1) lime bulk loading bin, constructed in 1996 and modified in 2004, with a maximum capacity of 60 tons, with a nominal throughput of 3.6 tons per hour, with particulate matter emissions controlled by the Bulk Lime Bin Vent Dust Collector, identified as emissions point 52, and exhausting to one (1) stack, identified as S-56.
- (h) Two (2) perlite ore storage bins, constructed in 1956, each with a maximum capacity of 250 tons and a maximum throughput of 1.6 tons per hour, and with particulate matter emissions exhausting to the atmosphere.
- (i) One (1) natural gas or fuel oil-fired perlite ore expander, constructed in 1956, with a maximum throughput of 1.6 tons per hour, and a maximum heat input capacity of 2.3 million Btu per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the Perlite Expander Burner Cyclones (emission point 43), and exhausting to one (1) stack, identified as S-47.
- (j) One (1) expanded perlite aggregate storage bin, with a maximum capacity of 24 tons, with a maximum throughput of 1.6 tons per hour, constructed in 1956, with particulate matter emissions controlled by the Perlite Dust Collector, identified as emissions point 29, and exhausting to one (1) stack, identified as S-29.
- (k) Two (2) stucco bins, North and South Packing Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 60 tons, with a maximum throughput of 27 tons per hour, with particulate matter controlled by two (2) baghouses, identified as the North and South Packing Bin Dust Collectors, emission points 57 and 58, and exhausting to two (2) stacks, identified as S-61 and S-62.
- (l) One (1) plaster mixer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
- (m) One (1) plaster packer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.

- (8) The following stucco handling and storage facilities:
- (a) A conveying system, constructed in 1955, consisting of belt and pneumatic conveyors, with a maximum throughput of 101.7 tons per hour, with particulate matter emissions controlled by five (5) baghouses, identified as the A-Belt Dust Collector (emissions point 16), the Head End of D-Belt Dust Collector (emission point 24), the Tail End of F Belt Dust Collector (emission point 28), the Stucco Air Conveyor Receiving Dust Collector (emission point 46), and the Stucco Air Conveyor Inlet Dust Collector (emission point 47), and exhausting to five (5) stacks, identified as S-16, S-24, S-28, S-50, and S-51, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) Mill Surge bin, constructed in 1955, with a maximum throughput of 55 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15.
 - (c) Two (2) stucco storage bins, #4, and #5 Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as the #4 and #5 Stucco Storage Bin Dust Collectors (emissions points 22 and 23), and each exhausting to two (2) stacks, identified as S-22 and S-23, respectively.
 - (d) Two (2) stucco storage bins, identified as the #2 Board Stucco Bin and #3 Stucco Storage Bin, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour and 27.5 tons per hour, respectively, with particulate matter emissions controlled by the #2 / #3 Stucco Storage Bin Dust Collector, identified as emissions point 31, and exhausting to one (1) stack, identified as S-31.
 - (e) One (1) stucco storage bin, identified as the 1000 Ton Stucco Storage Bin, constructed in 1998, with a maximum capacity of 1000 tons and a maximum throughput of 27.5 tons, with particulate matter emissions controlled by the 1000 Ton Stucco Storage Bin Vent Dust Collector, identified as emissions point 53, and exhausting to one (1) stack, identified as S-57. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (9) The following #1 wallboard production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 40 tons per hour, consisting of screw and belt conveyors and airveyor and bucket elevators, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) stucco storage bin, constructed in 1955, with a maximum capacity of 40 tons and a maximum throughput of 25 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50.

- (c) One (1) ball mill #1, constructed in 1998, with a maximum throughput of 1.8 tons per hour, with particulate matter emissions controlled by the Board Plant HRA Ball Mill Dust Collector, identified as emissions point 37, and exhausting to one (1) stack, identified as S-37. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) Five (5) dry additive feeders, constructed in 1955, with a maximum combined throughput of 4.5 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (e) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Board Line PST Belt Dust Collector, identified as emissions point 56, and exhausting to one (1) stack, identified as S-60 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (f) One (1) paper fiber hammermill, constructed in 1955, with a maximum throughput of 0.12 tons per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the #1 Board Paper Fiber Hammer Mill Cyclones (emissions point 44) and exhausting to (1) stack, identified as S-48.
 - (g) One (1) gypsum panel slurry mixer, constructed in 1955 and replaced in 2002, with a maximum throughput of 46.5 tons per hour less water and 80.81 tons per hour with water, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to (1) stack identified as S-50.
 - (h) One (1) forming belt, constructed in 1955, with a maximum throughput of 40,000 square feet per hour, and exhausting inside the building.
 - (i) One (1) natural gas-fired drying kiln, identified as #1 Board Kiln, constructed in 1955, identified as emissions point 41, with a heat input capacity of 55 million Btu per hour, and exhausting to one (1) stack, identified as S-45. No. 2 fuel oil will also be used as a supplemental fuel.
 - (j) One (1) end saw, constructed in 1955, with a maximum throughput of 40,000 square feet of board per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
 - (k) One (1) gypsum lay-in panel (GLIP) operation, constructed in 1995 and modified in 2004, with a maximum throughput of 28,800 square feet per hour, with particulate matter emissions controlled by the G.L.I.P. Saw Dust Collector, identified as emissions point 55, and exhausting to one (1) stack, identified as S-59, and consisting of
 - (1) Two (2) gypsum lay-in-panel (GLIP) saws; and
 - (2) One (1) adhesive operation.
- (10) The following #2 wallboard production facilities:

- (a) A conveying system, constructed in 1964 with an airveyor added in 1995, with a maximum throughput of 60 tons per hour, consisting of screw and belt conveyors and bucket elevators and an air slide, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (b) One (1) stucco storage silo, constructed in 1964, with a maximum capacity of 40 tons and a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (c) One (1) HRA Airveyor and Receiving Bin, constructed in 1998, with a maximum throughput of 1.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line HRA Receiving Bin Dust Collector, identified as emissions point 59, and exhausting to one (1) stack, identified as S-63. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #2 Board Line PST Dust Collector, identified as emissions point 27, and exhausting to one (1) stack, identified as S-27 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (e) Five (5) dry additive feeders, constructed in 1964, with a combined maximum throughput of 4.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (f) One (1) gypsum panel slurry mixer, constructed in 1964, with a maximum throughput of 64.5 tons per hour less water and 80.81 tons per hour with water, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack identified as S-32.
 - (g) One (1) forming belt, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, and exhausting inside the building.
 - (h) One (1) natural gas-fired drying kiln, identified as #2 Board Kiln, constructed in 1964, identified as emissions point 42, with a heat input capacity of 80 million Btu per hour, and exhausting to one (1) stack, identified as S-46. No. 2 fuel oil will also be used as a supplemental fuel.
 - (i) One (1) end saw, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
- (11) The Dunnage machine facilities:

- (a) One (1) Dunnage machine with saws, constructed in 1996, with a maximum throughput of 2400 square feet per hour, with particulate matter emissions controlled by the Dunnage Machine Dust Collector, identified as emissions point 50, and exhausting to (1) stack, identified as S-54.
- (12) The following synthetic gypsum and wallboard waste reclamation facilities:
- (a) One (1) three (3) walled synthetic gypsum storage shed, constructed in 1998, with a maximum throughput of 50 tons per hour, with a capacity of 0.64 acres, and with particulate matter emissions exhausting directly to the atmosphere.
 - (b) One (1) synthetic gypsum/waste reclaim belt, constructed in 1998, with a maximum throughput of 50 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting inside the building or directly to the atmosphere. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) synthetic gypsum storage bin, constructed in 1995, with a capacity of 60 tons and a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by moisture suppression, and exhausting inside the storage bin building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) natural gas or fuel oil-fired impact dryer mill, identified as the Williams Mill, constructed in 1995, with a maximum throughput of 50 tons per hour, with a heat input capacity of 30 million Btu per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (e) One (1) vibrating screens system, constructed in 1995, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (f) One (1) waste wallboard shredder, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions exhausting inside a partial enclosure.
 - (g) One (1) waste surge pile, constructed in 1995, with a nominal capacity of 5 tons per hour, with particulate matter emissions exhausting inside a partial enclosure.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Combustion related activities, including the following:
 - (1) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuels:

- (A) Propane or liquefied petroleum gas or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (B) Combustion source flame safety purging on startup.
- (b) Fuel dispensing activities, including the following:
 - (1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.
- (c) Routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (d) Water based activities, including the following:
 - (1) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (e) Repair activities, including the following:
 - (1) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
 - (2) Heat exchanger cleaning and repair.
- (f) Conveyors as follows:
 - (1) Underground conveyors.
- (g) Asbestos abatement projects regulated by 326 IAC 14-10.
- (h) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including the following:
 - (1) Catch tanks.
- (i) Activities associated with emergencies, including the following:
 - (1) Stationary fire pump engines.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T101-17814-00001, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-7-5(5)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) 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.

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.
- This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
- (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, IDEM, OAQ, 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. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T101-17814-00001 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (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 2-7-20(a). 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 is not considered an application form, report or compliance certification. Therefore, the notification 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 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, 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.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

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

C.2 Opacity [326 IAC 5-1]

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

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

C.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.

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

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

C.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. The plan is included as Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed

and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

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

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 09, 1996.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal

or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.21 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 OPERATION CONDITIONS - Mining, Storage, and Bulk Rock Loading Facilities

Facility Description [326 IAC 2-7-5(15)]

- (3) The following gypsum ore mining and storage facilities:
- (g) One (1) primary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting inside the mine.
 - (h) One (1) mine shaft conveyor, constructed in 1955, used to convey gypsum ore from the mine to the surface, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
 - (i) One (1) secondary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting inside the crusher building.
 - (j) Two (2) ore storage silos and (1) #1 Rock Belt, constructed in 1955, each bin with a capacity of 500 tons, a maximum throughput on the #1 Rock Belt of 250 tons per hour and a nominal throughput of 100 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting directly to the atmosphere.
 - (k) One (1) Stacker Belt, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 40 tons per hour due to downstream bottlenecking, (1) Ore storage pile, with a storage area of 3.75 acres, with a semicircular partial enclosure, and with particulate matter emissions exhausting to the atmosphere.
 - (l) One (1) #2 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (4) The following bulk rock loading facilities:
- (f) One (1) #3 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
 - (g) One (1) rock ore screen, constructed in 1955, with a nominal throughput of 140 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (h) One (1) crusher, constructed in 1955, with a maximum throughput of 110 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (i) One (1) #4 Rock Belt, with a maximum throughput of 140 tons per hour, one (1) bulk rock storage silo, constructed in 1955, with a maximum capacity of 375 tons, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
 - (j) One (1) #5 Rock Belt, Cement Rock Loading, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

The Permittee shall comply with the following:

Emission Unit	PM/PM10 Limit (lbs/hr)
Primary Crusher	0.03

Compliance with the above limits, in conjunction with the limits in Condition D.2.1 and the potential to emit PM/PM10 from other emission units and insignificant activities at the source, shall limit the PM/PM10 emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing process), the following limits shall apply:

Emission Unit	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
Primary Crusher	140	54.72
Mine Shaft Conveyor	140	54.72
Secondary Crusher	140	54.72
Rock Ore Screen	140	54.72
Crusher	110	52.24

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

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

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

(b) Pursuant to 326 IAC 6-3-2(e)(3), when the process weight rate exceeds 200 tons per hour, the PM emissions may exceed the limit determined by the equation above, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.1.3 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

A Preventative Maintenance Plan, in accordance with Section B - Preventative Maintenance Plan, of this permit, is required for these facilities.

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

D.1.4 Visible Emission Notations

- (a) Daily visible emission notations of the exhausts from the enclosures for the crushers, screen, and mine shaft conveyor shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C-Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.5 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records of visible emission notations from the enclosures for the crushers, screen, and mine shaft conveyor exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS - Rock Dryer, Glass Batch, Landplaster, Stucco, Plaster, Stucco Handling & Storage, #1 Wallboard, #2 Wallboard, Dunnage Machine, and Synthetic Gypsum & Wallboard Waste Reclamation Facilities

Facility Description [326 IAC 2-7-5(15)]

- (3) The following rotary rock dryer facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 90 tons per hour, consisting of belt, screw, and bucket elevators, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) dryer feed bin, constructed in 1955, with a maximum capacity of 60 tons, with maximum throughput of 90 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (c) One (1) natural gas or fuel oil-fired rotary rock dryer, constructed in 1955, with a heat input capacity of 14 million Btu per hour, with a maximum throughput of 90 tons per hour, with particulate matter emissions controlled by the Rock Dryer Dust Collector, identified as emission points 10, and exhausting to one (1) stack, identified as S-10.
- (4) The following glass batch production facilities:
- (a) A conveying system, constructed in 1966, consisting of screw conveyors, with a maximum throughput of 10 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) screening operation, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch System Dust Collector, identified as emission point 13, and exhausting to one (1) stack, identified as S-13.
 - (c) One (1) glass batch belt and storage bin, constructed in 1966, with a maximum throughput of 10 tons per hour, with a bin capacity of 85 tons, and with particulate matter emissions exhausting directly to the atmosphere.
 - (d) One Glass Batch Loading Station, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) glass batch separator, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch System Dust Collector, identified as emissions point 13, and exhausting to one (1) stack, identified as S-13.
 - (f) One (1) glass batch packing system, constructed in 1966 and modified in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
 - (g) One (1) glass batch airveyor receiving bin, constructed in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Glass Batch Receiving Bin Dust Collector, identified as emission point 40, and exhausting to one (1) stack, identified as S-40. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (5) The following landplaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 80 tons per hour, consisting of screw conveyors, with particulate matter emissions controlled by two (2) baghouses, identified as the #1 / #2 Raymond Mill Dust Collector and the #3 / #4 Raymond Mill Dust Collector, also identified as emission points 11 and 12, and exhausting to two (2) stacks, identified as S-11 and S-12, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.

- (b) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #1, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (c) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #1, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, and with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (d) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #2, with a nominal throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (e) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #2, with a maximum capacity of 150 tons, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (f) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #3, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (g) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #3, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (h) One (1) Raymond grinding mill, constructed in 1980, identified as Raymond Mill #4, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (i) One (1) Raymond Mill feed bin, constructed in 1980, identified as Raymond Feed Bin #4, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (j) One (1) Board Plant HRA landplaster receiving bin, constructed in 1986, with a capacity of 5 tons, with a maximum throughput of 2 tons per hour, with particulate matter emissions controlled by the HRA L.P. Air Conveyor Receiver Dust Collector, identified as emissions point 36, and exhausting to one (1) stack, identified as S-36. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (6) The following stucco production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 101.7 tons/hr, consisting of screw conveyors, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) calcining kettle, identified as MBR Kettle #1, constructed in 1999, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (c) One (1) kettle feed bin, identified as #1 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emission point 1, and exhausting to one (1) stack, identified as S-1.

- (d) Three (3) natural gas or fuel oil-fired kettle burners, constructed in 1999, identified as #1 Kettle Burners, with a heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-41. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
- (e) One (1) hot pit, constructed in 1955 and modified in 1999, identified as Hot Pit #1, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1.
- (f) One (1) calcining kettle, identified as Kettle #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (g) One (1) kettle feed bin, identified as #2 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, and with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (h) One (1) natural gas or fuel oil-fired kettle burner, constructed in 1955, identified as #2 Kettle Burner, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-42.
- (i) One (1) hot pit, identified as Hot Pit #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (j) One (1) calcining kettle, identified as Kettle #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emissions point 3, and exhausting to one (1) stack, identified as S-3.
- (k) One (1) kettle feed bin, identified as #3 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emission point 3, and exhausting to one (1) stack, identified as S-3.
- (l) One (1) natural gas or fuel oil-fired kettle burner, identified as #3 Kettle Burner, constructed in 1955, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-43.
- (m) One (1) hot pit, identified as Hot Pit #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emission point 3, and exhausting to one (1) stack, identified as S-3.
- (n) One (1) calcining kettle, identified as Kettle #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (o) One (1) kettle feed bin, identified as #4 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (p) Two (2) natural gas or fuel oil-fired kettle burners, identified as #4 Kettle Burners, constructed in 1955, with a combined heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-44.
- (q) One (1) hot pit, identified as Hot Pit #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.

- (r) One (1) calcining kettle, identified as Kettle #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Kettle Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.
 - (s) One (1) Kettle Feed Bin, identified as #5 Kettle Feed Bin, constructed in 1986, with a maximum capacity of 125 tons, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emission point 35, and exhausting to one (1) stack, identified as S-35.
 - (t) One (1) natural gas or fuel oil-fired kettle burner, identified as #5 Kettle Burner, constructed in 1986, with a heat input capacity of 20 million Btu per hour, and exhausting to one (1) stack, identified as S-5.
 - (u) One (1) hot pit, identified as Hot Pit #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by enclosure, and by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.
- (7) The following plaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 9 tons per hour, consisting of screw and belt conveyors and bucket elevator, with particulate matter emissions controlled by three (3) baghouses, identified as the B-Belt Dust Collector (emissions point 17), the Tail End of D-Belt Dust Collector (emission point 25), and the Plaster Packing Dust Collector (emission point 30), and exhausting to three (3) stacks, identified as S-17, S-25 and S-30, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) tube mill feed bin, constructed in 1955 and modified in 2001, with a maximum capacity of 60 tons, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) tube mill, constructed in 1955 and modified in 2001, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Tube Mill Dust Collector, identified as emissions point 14, and exhausting to one (1) stack, identified as S-14. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) Two (2) stucco storage bins, #0 North and #0 South Stucco Bins, constructed in 1955, each with a maximum capacity of 70 tons, each with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as the #0 North Stucco Storage Bin Dust Collector (emissions point 18), and the #0 South Stucco Storage Bin Dust Collector (emission point 19), and exhausting to two (2) stacks, identified as S-18 and S-19.
 - (e) One (1) stucco storage bin, #1 Stucco Bin, constructed in 1955, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Stucco Storage Bin Dust Collector, identified as emissions point 20, and exhausting to one (1) stack, identified as S-20.
 - (f) One (1) sand bulk loading bin, constructed in 1996, with a maximum capacity of 60 tons, with a nominal throughput of 12 tons per hour, with particulate matter emissions controlled by Bulk Sand Bin Vent Dust Collector, identified as emissions point 51, and each exhausting to one (1) stack, identified as S-55. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (g) One (1) lime bulk loading bin, constructed in 1996 and modified in 2004, with a maximum capacity of 60 tons, with a nominal throughput of 3.6 tons per hour, with particulate matter emissions controlled by the Bulk Lime Bin Vent Dust Collector, identified as emissions point 52, and exhausting to one (1) stack, identified as S-56. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

- (h) Two (2) perlite ore storage bins, constructed in 1956, each with a maximum capacity of 250 tons and a maximum throughput of 1.6 tons per hour, and with particulate matter emissions exhausting to the atmosphere.
 - (i) One (1) natural gas or fuel oil-fired perlite ore expander, constructed in 1956, with a maximum throughput of 1.6 tons per hour, and a maximum heat input capacity of 2.3 million Btu per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the Perlite Expander Burner Cyclones (emission point 43), and exhausting to one (1) stack, identified as S-47.
 - (j) One (1) expanded perlite aggregate storage bin, with a maximum capacity of 24 tons, with a maximum throughput of 1.6 tons per hour, constructed in 1956, with particulate matter emissions controlled by the Perlite Dust Collector, identified as emissions point 29, and exhausting to one (1) stack, identified as S-29.
 - (k) Two (2) stucco bins, North and South Packing Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 60 tons, with a maximum throughput of 27 tons per hour, with particulate matter controlled by two (2) baghouses, identified as the North and South Packing Bin Dust Collectors, emission points 57 and 58, and exhausting to two (2) stacks, identified as S-61 and S-62.
 - (l) One (1) plaster mixer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
 - (m) One (1) plaster packer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
- (8) The following stucco handling and storage facilities:
- (a) A conveying system, constructed in 1955, consisting of belt and pneumatic conveyors, with a maximum throughput of 101.7 tons per hour, with particulate matter emissions controlled by five (5) baghouses, identified as the A-Belt Dust Collector (emissions point 16), the Head End of D-Belt Dust Collector (emission point 24), the Tail End of F Belt Dust Collector (emission point 28), the Stucco Air Conveyor Receiving Dust Collector (emission point 46), and the Stucco Air Conveyor Inlet Dust Collector (emission point 47), and exhausting to five (5) stacks, identified as S-16, S-24, S-28, S-50, and S-51, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) Mill Surge bin, constructed in 1955, with a maximum throughput of 55 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15.
 - (c) Two (2) stucco storage bins, #4, and #5 Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as the #4 and #5 Stucco Storage Bin Dust Collectors (emissions points 22 and 23), and each exhausting to two (2) stacks, identified as S-22 and S-23, respectively.
 - (d) Two (2) stucco storage bins, identified as the #2 Board Stucco Bin and #3 Stucco Storage Bin, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour and 27.5 tons per hour, respectively, with particulate matter emissions controlled by the #2 / #3 Stucco Storage Bin Dust Collector, identified as emissions point 31, and exhausting to one (1) stack, identified as S-31.
 - (e) One (1) stucco storage bin, identified as the 1000 Ton Stucco Storage Bin, constructed in 1998, with a maximum capacity of 1000 tons and a maximum throughput of 27.5 tons, with particulate matter emissions controlled by the 1000 Ton Stucco Storage Bin Vent Dust Collector, identified as emissions point 53, and exhausting to one (1) stack, identified as S-57. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (9) The following #1 wallboard production facilities:

- (a) A conveying system, constructed in 1955, with a maximum throughput of 40 tons per hour, consisting of screw and belt conveyors and airveyor and bucket elevators, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
- (b) One (1) stucco storage bin, constructed in 1955, with a maximum capacity of 40 tons and a maximum throughput of 25 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50.
- (c) One (1) ball mill #1, constructed in 1998, with a maximum throughput of 1.8 tons per hour, with particulate matter emissions controlled by the Board Plant HRA Ball Mill Dust Collector, identified as emissions point 37, and exhausting to one (1) stack, identified as S-37. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (d) Five (5) dry additive feeders, constructed in 1955, with a maximum combined throughput of 4.5 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
- (e) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Board Line PST Belt Dust Collector, identified as emissions point 56, and exhausting to one (1) stack, identified as S-60 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (f) One (1) paper fiber hammermill, constructed in 1955, with a maximum throughput of 0.12 tons per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the #1 Board Paper Fiber Hammer Mill Cyclones (emissions point 44) and exhausting to (1) stack, identified as S-48.
- (g) One (1) gypsum panel slurry mixer, constructed in 1955 and replaced in 2002, with a maximum throughput of 46.5 tons per hour less water and 80.81 tons per hour with water, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to (1) stack identified as S-50.
- (h) One (1) forming belt, constructed in 1955, with a maximum throughput of 40,000 square feet per hour, and exhausting inside the building.
- (i) One (1) natural gas-fired drying kiln, identified as #1 Board Kiln, constructed in 1955, identified as emissions point 41, with a heat input capacity of 55 million Btu per hour, and exhausting to one (1) stack, identified as S-45. No. 2 fuel oil will also be used as a supplemental fuel.
- (j) One (1) end saw, constructed in 1955, with a maximum throughput of 40,000 square feed of board per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
- (k) One (1) gypsum lay-in panel (GLIP) operation, constructed in 1995 and modified in 2004, with a maximum throughput of 28,800 square feet per hour, with particulate matter emissions controlled by the G.L.I.P. Saw Dust Collector, identified as emissions point 55, and exhausting to one (1) stack, identified as S-59, and consisting of
 - (1) Two (2) gypsum lay-in-panel (GLIP) saws; and
 - (2) One (1) adhesive operation.

(10) The following #2 wallboard production facilities:

- (a) A conveying system, constructed in 1964 with an airveyor added in 1995, with a maximum throughput of 60 tons per hour, consisting of screw and belt conveyors and bucket elevators and an air slide, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (b) One (1) stucco storage silo, constructed in 1964, with a maximum capacity of 40 tons and a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (c) One (1) HRA Airveyor and Receiving Bin, constructed in 1998, with a maximum throughput of 1.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line HRA Receiving Bin Dust Collector, identified as emissions point 59, and exhausting to one (1) stack, identified as S-63. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #2 Board Line PST Dust Collector, identified as emissions point 27, and exhausting to one (1) stack, identified as S-27 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (e) Five (5) dry additive feeders, constructed in 1964, with a combined maximum throughput of 4.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (f) One (1) gypsum panel slurry mixer, constructed in 1964, with a maximum throughput of 64.5 tons per hour less water and 80.81 tons per hour with water, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack identified as S-32.
 - (g) One (1) forming belt, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, and exhausting inside the building.
 - (h) One (1) natural gas-fired drying kiln, identified as #2 Board Kiln, constructed in 1964, identified as emissions point 42, with a heat input capacity of 80 million Btu per hour, and exhausting to one (1) stack, identified as S-46. No. 2 fuel oil will also be used as a supplemental fuel.
 - (i) One (1) end saw, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
- (11) The Dunnage machine facilities:
- (a) One (1) Dunnage machine with saws, constructed in 1996, with a maximum throughput of 2400 square feet per hour, with particulate matter emissions controlled by the Dunnage Machine Dust Collector, identified as emissions point 50, and exhausting to (1) stack, identified as S-54.
- (12) The following synthetic gypsum and wallboard waste reclamation facilities:
- (a) One (1) three (3) walled synthetic gypsum storage shed, constructed in 1998, with a maximum throughput of 50 tons per hour, with a capacity of 0.64 acres, and with particulate matter emissions exhausting directly to the atmosphere.

- (b) One (1) synthetic gypsum/waste reclaim belt, constructed in 1998, with a maximum throughput of 50 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting inside the building or directly to the atmosphere. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) synthetic gypsum storage bin, constructed in 1995, with a capacity of 60 tons and a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by moisture suppression, and exhausting inside the storage bin building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) natural gas or fuel oil-fired impact dryer mill, identified as the Williams Mill, constructed in 1995, with a maximum throughput of 50 tons per hour, with a heat input capacity of 30 million Btu per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (e) One (1) vibrating screens system, constructed in 1995, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (f) One (1) waste wallboard shredder, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions exhausting inside a partial enclosure.
 - (g) One (1) waste surge pile, constructed in 1995, with a nominal capacity of 5 tons per hour, with particulate matter emissions exhausting inside a partial enclosure. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (The information describing the process in this facility description is descriptive information and does not constitute enforceable condition.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limits and HAP Minor Limit [326 IAC 2-2][326 IAC 20][40 CFR 63]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the Permittee shall comply with the following:

- (a) PM/PM10 limits listed in the table below.

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
MBR Kettle #1, #1 Kettle Feed Bin, & Hot Pit #1	#1 Kettle Dust Collector	1 / S-1	1.03
Kettle #2, #2 Kettle Feed Bin, & Hot Pit #2	#2 Kettle Dust Collector	2 / S-2	0.84
Kettle #3, #3 Kettle Feed Bin, & Hot Pit #3	#3 Kettle Dust Collector	3 / S-3	0.84
Kettle #4, #4 Kettle Feed Bin, & Hot Pit #4	#4 Kettle Dust Collector	4 / S-4	0.84
Kettle #5 & Hot Pit #5	#5 Kettle Dust Collector	5 / S-5	1.80
Rotary Rock Dryer	Rock Dryer Dust Collector	10 / S-10	2.57

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
Landplaster Conveying System and #1 / #2 Raymond Mill & Raymond Mill Feed Bin #1	#1 / #2 Raymond Mill Dust Collector	11 / S-11	0.77
Landplaster Conveying System and #3 / #4 Raymond Mill & Raymond Mill Feed Bin #2 - #4	#3 / #4 Raymond Mill Dust Collector	12 / S-12	0.64
Glass Batch Screening Operation & Glass Batch Separator	Glass Batch System Dust Collector	13 / S-13	0.26
Tube Mill	Tube Mill Dust Collector	14 / S-14	0.51
Tube Mill Feed Bin & Mill Surge Bin	Mill Stucco Surge Bin Dust Collector	15 / S-15	0.32
Stucco Handling & Storage Facilities Conveying System	A-Belt Dust Collector	16 / S-16	0.04
Plaster Conveying System	B-Belt Dust Collector	17 / S-17	0.04
#0 North Stucco Bin	#0 North Stucco Bin Dust Collector	18 / S-18	0.04
#0 South Stucco Bin	#0 South Stucco Bin Dust Collector	19 / S-19	0.04
#1 Stucco Bin	#1 Stucco Bin Dust Collector	20 / S-20	0.04
#4 Stucco Storage Bin	#4 Stucco Storage Bin Dust Collector	22 / S-22	0.04
#5 Stucco Storage Bin	#5 Stucco Storage Bin Dust Collector	23 / S-23	0.04
Stucco Handling & Storage Facilities Conveying System	Head End of D-Belt Dust Collector	24 / S-24	0.04
Plaster Conveying System	D-Belt Dust Collector	25 / S-25	0.04
PST System	#2 Board Line PST Dust Collector	27 / S-27	0.06
Stucco Handling & Storage Facilities Conveying System	Tail End of F Belt Dust Collector	28 / S-28	0.32
Expanded Perlite Aggregate Storage Bin	Perlite Dust Collector	29 / S-29	0.39
Glass Batch Packing System, Plaster Conveying System, Plaster Mixer, & Plaster Packer	Plaster Packing Dust Collector	30 / S-30	1.16
#2 & #3 Stucco Storage Bins	#2/ #3 Stucco Storage Bin Dust Collectors	31 / S-31	0.39
Stucco Storage Silo, Dry Additive Feeders,	#2 Board Line Stucco Bin Dust Collector	32 / S-32	0.39

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
& Gypsum Panel Slurry Mixer			
#1 Wallboard & #2 Wallboard End Saws	North and South Board Plant End Saw Dust Collectors	33 / S-33 & 34 / S-34	1.03
#5 Kettle Feed Bin	#5 Conical Kettle LP Feed Bin Dust Collector	35 / S-35	0.19
Board Plant HRA Landplaster Receiving Bin	HRA L.P. Air Conveyor Receiver Dust Collector	36 / S-36	0.19
Ball Mill #1	Board Plant HRA Ball Mill Dust Collector	37 / S-37	0.15
Glass Batch Airveyor Receiving Bin	Mill Glass Batch Receiving Bin Dust Collector	40 / S-40	0.21
#2 Board Kiln		42 / S-46	2.46
Perlite Ore Expander	Perlite Expander Burner Cyclones	43 / S-47	1.68
Paper Fiber Hammermill	#1 Board Paper Fiber Hammer Mill Cyclones	44 / S-48	0.96
Stucco Handling and Storage Facilities Conveying System, #1 Wallboard Conveying System, Stucco Storage Bin, 5 Dry Additive Feeders, Gypsum Panel Slurry Mixer, & #2 Wallboard Conveying System	Stucco Air Conveyor Receiving Dust Collector	46 / S-50	0.64
Stucco Handling & Storage Facilities Conveying System	Stucco Air Conveyor Inlet Dust Collector	47 / S-51	0.10
Vibrating Screen System & Williams Mill	Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector	49 / S-53	6.86
Dunnage Machine	Dunnage Machine Dust Collector	50 / S-54	0.69
Sand Bulk Loading Bin	Bulk Sand Bin Vent Dust Collector	51 / S-55	0.13
Lime Bulk Loading Bin	Bulk Lime Bin Vent Dust Collector	52 / S-56	0.10
1000 Ton Stucco Storage Bin	1000 Ton Stucco Storage Bin Vent Dust Collector	53 / S-57	1.03
G.L.I.P. Operation	G.L.I.P. Saw Dust Collector	55 / S-59	1.35
PST System	#1 Board Line PST Belt Dust Collector	56 / S-60	0.06
North Packing Stucco Storage Bin	North Packing Bin Dust Collector	57 / S-61	0.05
South Packing Stucco Storage bin	South Packing Bin Dust Collector	58 / S-62	0.05
HRA Airveyor and Receiving Bin	#2 Board Line HRA Receiving Bin Dust	59 / S-63	0.06

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
	Collector		
Synthetic Gypsum Storage Bin	Moisture Suppression		0.66

- (b) The plant wide fuel oil usage shall not exceed 3,000 kgal per 12 consecutive month period, with compliance determined at the end of each month. In addition, the fuel oil shall not exceed five-tenths (0.5%) sulfur content by weight.
- (c) The PM/PM₁₀ limits for the #1 Board Kiln shall be as follows:
- (1) When not using mold/water resistant additives:
 - (a) The PM emissions from the #1 Board Kiln shall not exceed 1.32 lbs/hr.
 - (b) The PM₁₀ emissions from the #1 Board Kiln shall not exceed 1.62 lbs/hr.
 - (2) When using mold/water resistant additives:
 - (a) Mold/water resistant additive usage in the #1 Board Kiln shall not exceed 2,000,000 pounds per 12 consecutive month period, with compliance determined at the end of each month. Compliance with this limit shall limit Formaldehyde emissions to less than ten (10) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 20 and 40 CFR 63 not applicable.
 - (b) The PM emissions from the #1 Board Kiln shall not exceed 11.52 lbs/hr.
 - (c) The PM₁₀ emissions from the #1 Board Kiln shall not exceed 11.82 lbs/hr.

Compliance with the above limits, in conjunction with the limits in Condition D.1.1 and the potential to emit PM/PM₁₀ from other emission units and insignificant activities at the source, shall limit the PM/PM₁₀, NO_x, and SO₂ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

D.2.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the Permittee shall comply with the PM limits, when operating at the associated process weight rates, as shown in the table below:

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
Rotary Rock Dryer Facilities	Rotary rock dryer	10 / S-10	90	50.23
Glass Batch Production Facilities	Conveying system		10	19.18
	Screening operation	13 / S-13	10	19.18
	Glass batch belt & storage bin		10	19.18
	Glass batch loading station		10	19.18

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	Glass batch separator	13 / S-13	10	19.18
	Glass batch packing system	30 / S-30	10	19.18
	Glass batch airveyor receiving bin	40 / S-40	10	19.18
Landplaster Production Facilities	Conveying system	11 / S-11 & 12 / S-12	80	49.06
	Raymond mill #1	11 / S-11	20	30.51
	Raymond feed bin #1	11 / S-11	20	30.51
	Raymond mill #2	11 / S-11	20	30.51
	Raymond feed bin #2	12 / S-12	20	30.51
	Raymond mill #3	12 / S-12	20	30.51
	Raymond feed bin #3	12 / S-12	20	30.51
	Raymond mill #4	12 / S-12	20	30.51
Stucco Production Facilities	Conveying system		101.7	51.45
	Kettle #1	1 / S-1	35.2	41.37
	Kettle feed bin #1	1 / S-1	35.2	41.37
	Hot pit #1	1 / S-1	35.2	41.37
	Kettle #2	2 / S-2	12	21.67
	Kettle feed bin #2	2 / S-2	12	21.67
	Hot pit #2	2 / S-2	12	21.67
	Kettle #3	3 / S-3	12	21.67
	Kettle feed bin #3	3 / S-3	12	21.67
	Hot pit #3	3 / S-3	12	21.67
	Kettle #4	4 / S-4	15	25.16
	Kettle feed bin #4	4 / S-4	15	25.16
	Hot pit #4	4 / S-4	15	25.16
	Kettle #5	5 / S-5	27.5	37.77
	Kettle feed bin #5	35 / S-35	27.5	37.77
Hot pit #5	5 / S-5	27.5	37.77	
Plaster Production Facilities	Conveying system	17 / S-17, 25 / S-25, & 30 / S-30	9	17.87
	Tube mill feed bin	15 / S-15	10	19.18
	Tube mill	14 / S-14	10	19.18
	#0 North stucco storage bins	18 / S-18	20	30.51
	#0 South stucco storage bins	19 / S-19	20	30.51
	#1 Stucco storage bin	20 / S-20	20	30.51

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	Sand bulk loading bin	51 / S-55	12	21.67
	Perlite ore expander	43 / S-47	1.6	5.62
	North plaster packing bin	57 / S-61	27	37.31
	South plaster packing bin	58 / S-62	27	37.31
	Plaster mixer	30 / S-30	27	37.31
	Plaster packer	30 / S-30	27	37.31
Stucco Handling & Storage Facilities	Conveying system	16 / S-16, 24 / S-24, 28 / S-28, 46 / S-50, & 47 / S-51	101.7	51.45
	Mill surge bin	15 / S-15	55	45.47
	#2 Stucco storage bin	31 / S-31	30	39.96
	#3 Stucco storage bin	31 / S-31	27.5	37.77
	#4 Stucco storage bin	22 / S-22	30	39.96
	#5 Stucco storage bin	23 / S-23	30	39.96
	1000 Ton stucco storage bin	53 / S-57	27.5	37.77
#1 Wallboard Production Facilities	Conveying system	46 / S-50	40	42.53
	Stucco storage bin	46 / S-50	25	35.43
	Ball Mill #1	37 / S-37	1.8	6.08
	Dry additive feeders	46 / S-50	4.5	11.23
	PST system	56 / S-60	20	30.51
	Paper fiber hammermill	44 / S-48	0.12	0.99
	Gypsum panel slurry mixer	46 / S-50	80.81	49.16
	Kiln #1	41 / S-45	49.5	56.00
	End saw	33 / S-33 & 34 / S-34	46.5	43.90
	Gypsum lay-in panel (GLIP) saws	55 / S-59	46.5	43.90
#2 Wallboard Production Facilities	Conveying system	46 / S-50	60	46.29
	Stucco storage silo	32 / S-32	60	46.29
	PST system	27 / S-27	20	30.51
	Dry additive feeders	32 / S-32	4.5	11.23

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	Gypsum panel slurry mixer	32 / S-32	80.81	49.16
	Kiln #2	42 / S-46	80.81	49.16
	End saw	33 / S-33 & 34 / S-34	64.5	43.9
Dunnage Machine Facilities	Dunnage Machine	50 / S-54	55	45.47
Synthetic Gypsum & Wallboard Waste Reclamation Facilities	Synthetic gypsum / waste reclaim belt	N/A	50	44.58
	Waste wallboard shredder	N/A	20	30.51
	Vibrating screens system	49 / S-53	50	44.58
	Williams Mill	49 / S-53	50	44.58
	Synthetic gypsum storage bin	N/A	50	44.58

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

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

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

and

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

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

D.2.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the #1 and #2 Wallboard kilns, calcining kettles #1 - #5, the rotary rock dryer, perlite expander, and the Williams Mill shall not exceed five-tenths (0.5) pound per million Btu heat input when combusting distillate oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.1, the Permittee shall:

- (a) For the purposes of PM and PM-10 compliance stack testing, the units at this source are grouped as follows:

Group A:

Dust Collector

#1/#2 Raymond Mill Dust Collector

Units

#1 Raymond Mill
#1 Raymond Mill Feed Bin
#2 Raymond Mill
Conveying System
#3 Raymond Mill
#2 Raymond Mill Feed Bin
#3 Raymond Mill Feed Bin
#4 Raymond Mill
#4 Raymond Mill Feed Bin
Conveying System

#3/#4 Raymond Mill Dust Collector

Group B:

Dust Collector

#1 Kettle Dust Collector

Units

MBR Kettle #1
#1 Kettle Feed Bin
Hot Pit #1
Kettle #2
#2 Kettle Feed Bin
Hot Pit #2
Kettle #3
#3 Kettle Feed Bin
Hot Pit #3
Kettle #4
#4 Kettle Feed Bin
Hot Pit #4
Kettle #5
Hot Pit #5

#2 Kettle Dust Collector

#3 Kettle Dust Collector

#4 Kettle Dust Collector

#5 Kettle Dust Collector

Group C:

Dust Collector

North Board Plant End Saw Dust Collector

Units

#1 Wallboard Line End Saw
#2 Wallboard Line End Saw
#1 Wallboard Line End Saw
#2 Wallboard Line End Saw

South Board Plant End Saw Dust Collector

- (b) The Permittee shall perform PM and PM-10 testing on one (1) dust collector from each of Groups A, B, and C within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the prior valid compliance demonstration. The source will test the dust collector for which the longest period of time has passed since the last valid compliance test. The first complete PM/PM-10 testing of Group B shall not include #1

Kettle Dust Collector. Testing shall be conducted in accordance with Section C- Performance Testing. PM-10 includes filterable and condensible PM.

- (c) Perform PM and PM-10 testing of the G.L.I.P. Saw Dust Collector within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM.
- (d) Perform PM and PM-10 testing of the #1 Board Kiln within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM.

D.2.6 Sulfur Dioxide (SO₂)

Compliance with Condition D.2.1 and D.2.3 shall be determined using the following:

- (a) Pursuant to 326 IAC 3-7-4 (Sulfur Dioxide Emissions and Sulfur Content), the Permittee shall demonstrate the fuel oil sulfur content does not exceed 0.5% by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

D.2.7 Particulate Control (Baghouse)

- (a) In order to comply with Conditions D.2.1 and D.2.2 the baghouses 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 46, 47, 49, 50, 51, 53, 55, 56, 57, 58 and 59 for particulate control shall be in operation and control emissions at all times that the associated emissions units are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.8 Particulate Control (Cyclone)

In order to comply with Conditions D.2.1 and D.2.2, the cyclones 43 and 44 for particulate control shall be in operation and control emissions at all times that the associated emission units are in operation.

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

D.2.9 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the points 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 43, 44, 46, 47, 49, 50, 51, 52, 53, 55, 56, 57, 58 and 59 stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.10 Parametric Monitoring (Baghouse) [40 CFR 64]

The Permittee shall record the pressure drop across each baghouse used in conjunction with emission points 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 46, 47, 49, 50, 51, 53, 55, 56, 57, 58 and 59 at least once per day when the associated process is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.2.11 Broken or Failed Bag Detection [40 CFR 64]

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

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

D.2.12 Cyclone Failure Detection [40 CFR 64]

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1(b), the Permittee shall maintain records of the plant wide fuel oil usage monthly.
- (b) To document compliance with Condition D.2.1(c), the Permittee shall maintain records of the plant wide mold/water resistant additive usage monthly.
- (c) To document compliance with Conditions D.2.1(b) and D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the emission limit established in D.2.1(b) and D.2.3.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (d) To document compliance with Conditions D.2.9, the Permittee shall maintain a daily record of visible emission notations of the points 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 43, 44, 46, 47, 49, 50, 51, 52, 53, 55, 56, 57, 58 and 59 stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
 - (e) To document compliance with Condition D.2.10, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the points 1, 2, 3, 4, 5, 7, 8,

10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 46, 47, 49, 50, 51, 53, 55, 56, 57, 58 and 59. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.2.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.2.1(b), D.2.1(c) and D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) To document compliance with Condition D.2.3, the Permittee shall certify, on the form provided, that natural gas was fired in the #1 and #2 Wallboard kilns, calcining kettles #1 - #5, the rotary rock dryer, perlite expander, and the Williams Mill, at all times during the report period. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during the report period. The form shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported.

SECTION E.1 FACILITY OPERATION CONDITIONS - New Source Performance Standards for Nonmetallic Mineral Processing [40 CFR 60, Subpart OOO]

Facility Description [326 IAC 2-7-5(15)]

- (4) The following glass batch production facilities:
- (f) One (1) glass batch airveyor receiving bin, constructed in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Glass Batch Receiving Bin Dust Collector, identified as emission point 40, and exhausting to one (1) stack, identified as S-40. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (5) The following landplaster production facilities:
- (j) One (1) Board Plant HRA landplaster receiving bin, constructed in 1986, with a capacity of 5 tons, with a maximum throughput of 2 tons per hour, with particulate matter emissions controlled by the HRA L.P. Air Conveyor Receiver Dust Collector, identified as emissions point 36, and exhausting to one (1) stack, identified as S-36. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (6) The following stucco production facilities:
- (s) One (1) Kettle Feed Bin, identified as #5 Kettle Feed Bin, constructed in 1986, with a maximum capacity of 125 tons, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emission point 35, and exhausting to one (1) stack, identified as S-35. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (7) The following plaster production facilities:
- (b) One (1) tube mill feed bin, constructed in 1955 and modified in 2001, with a maximum capacity of 60 tons, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) tube mill, constructed in 1955 and modified in 2001, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Tube Mill Dust Collector, identified as emissions point 14, and exhausting to one (1) stack, identified as S-14. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (f) One (1) sand bulk loading bin, constructed in 1996, with a maximum capacity of 60 tons, with a nominal throughput of 12 tons per hour, with particulate matter emissions controlled by Bulk Sand Bin Vent Dust Collector, identified as emissions point 51, and each exhausting to one (1) stack, identified as S-55. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (8) The following stucco handling and storage facilities:
- (e) One (1) stucco storage bin, identified as the 1000 Ton Stucco Storage Bin, constructed in 1998, with a maximum capacity of 1000 tons and a maximum throughput of 27.5 tons, with particulate matter emissions controlled by the 1000 Ton Stucco Storage Bin Vent Dust Collector, identified as emissions point 53, and exhausting to one (1) stack, identified as S-57. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (9) The following #1 wallboard production facilities:

- (c) One (1) ball mill #1, constructed in 1998, with a maximum throughput of 1.8 tons per hour, with particulate matter emissions controlled by the Board Plant HRA Ball Mill Dust Collector, identified as emissions point 37, and exhausting to one (1) stack, identified as S-37. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (e) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Board Line PST Belt Dust Collector, identified as emissions point 56, and exhausting to one (1) stack, identified as S-60 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (10) The following #2 wallboard production facilities:
- (a) A conveying system, constructed in 1964 with an airveyor added in 1995, with a maximum throughput of 60 tons per hour, consisting of screw and belt conveyors and bucket elevators and an air slide, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) HRA Airveyor and Receiving Bin, constructed in 1998, with a maximum throughput of 1.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line HRA Receiving Bin Dust Collector, identified as emissions point 59, and exhausting to one (1) stack, identified as S-63. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #2 Board Line PST Dust Collector, identified as emissions point 27, and exhausting to one (1) stack, identified as S-27 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (12) The following synthetic gypsum and wallboard waste reclamation facilities:
- (b) One (1) synthetic gypsum/waste reclaim belt, constructed in 1998, with a maximum throughput of 50 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting inside the building or directly to the atmosphere. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) synthetic gypsum storage bin, constructed in 1995, with a capacity of 60 tons and a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by moisture suppression, and exhausting inside the storage bin building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) natural gas or fuel oil-fired impact dryer mill, identified as the Williams Mill, constructed in 1995, with a maximum throughput of 50 tons per hour, with a heat input capacity of 30 million Btu per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (e) One (1) vibrating screens system, constructed in 1995, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

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

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

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

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

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standard for Nonmetallic Mineral Processing Requirements [40 CFR Part 60, Subpart OOO]

Pursuant to 40 CFR Part 60, Subpart OOO, the Permittee shall comply with the provisions of the New Source Performance Standard for Nonmetallic Mineral Processing (included as Attachment A of this permit) as specified as follows:

- (1) 40 CFR 60.670
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672
- (4) 40 CFR 60.673
- (5) 40 CFR 60.675
- (6) 40 CFR 60.676

**SECTION E.2 FACILITY OPERATION CONDITIONS - New Source Performance Standards for
Calciners and Dryers in Mineral Industries [40 CFR 60, Subpart UUU]**

Facility Description [326 IAC 2-7-5(15)]

- (6) The following stucco production facilities:
- (b) One (1) calcining kettle, identified as MBR Kettle #1, constructed in 1999, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (d) Three (3) natural gas or fuel oil-fired kettle burners, constructed in 1999, identified as #1 Kettle Burners, with a heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-41. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.

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

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

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the nonmetallic mineral processing operations except as otherwise specified in 40 CFR Part 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.2.2 New Source Performance Standard for Calciners and Dryers in Mineral Industries Requirements [40 CFR Part 60, Subpart UUU]

Pursuant to 40 CFR Part 60, Subpart UUU, the Permittee shall comply with the provisions of the New Source Performance Standard for Calciners and Dryers in Mineral Industries (included as Attachment B of this permit) as specified as follows:

- (1) 40 CFR 60.730
- (2) 40 CFR 60.731
- (3) 40 CFR 60.732
- (4) 40 CFR 60.733
- (5) 40 CFR 60.734
- (6) 40 CFR 60.735
- (7) 40 CFR 60.736
- (8) 40 CFR 60.737

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: U.S. Gypsum Company
Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
Part 70 Permit No.: T101-17814-00001

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: U.S. Gypsum Company
Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
Part 70 Permit No.: T101-17814-00001

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: U.S. Gypsum Company
Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
Part 70 Permit No.: T101-17814-00001

Natural Gas Only
 Alternate Fuel burned
From: _____ To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

Part 70 Quarterly Report

Source Name: U.S. Gypsum Company
 Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
 Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
 Part 70 Permit No.: T101-17814-00001
 Facility: All combustion sources
 Parameter: SO₂ (Usage Limit), Sulfur Content, and SO₂ Emissions
 Limit: 3,000,000 gallons per 12 month period and 3% sulfur content; 0.5 lbs/MMBtu

QUARTER :

YEAR:

Month	Fuel Oil Usage This Month (gallons)	Fuel Oil Usage Previous 11 Months (gallons)	Fuel Oil Usage 12 Month Total (gallons)	Sulfur Content (% by Wt.)	Sulfur Dioxide Emissions (lbs/MMBtu)

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: U.S. Gypsum Company
Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
Part 70 Permit No.: T101-17814-00001
Facility: # 1 Board Kiln
Parameter: mold/water resistant additive usage
Limit: 2,000,000 pounds per 12 consecutive month period

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: U.S. Gypsum Company
 Source Address: 12802 Deep Cut Lake Road, Shoals, Indiana 47581
 Mailing Address: P.O. Box 1377, Shoals, Indiana 47581
 Part 70 Permit No.: T101-17814-00001

Months: _____ to _____ Year: _____

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Attachment A

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 51 FR 31337, Aug. 1, 1985, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

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

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.

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

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

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

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

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

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

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

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

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

(f) table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.

Table 1—Applicability of Subpart A to Subpart 000

Subpart A reference	Applies to Subpart 000	Comment
60.1, Applicability	Yes	
60.2, Definitions	Yes	
60.3, Units and abbreviations	Yes	
60.4, Address:		
(a)	Yes	
(b)	Yes	
60.5, Determination of construction or modification	Yes	
60.6, Review of plans	Yes	
60.7, Notification and recordkeeping	Yes	Except in (a)(2) report of anticipated date of initial startup is not required (§60.676(h)).
60.8, Performance tests	Yes	Except in (d), after 30 days notice for an initially scheduled performance test, any rescheduled performance test requires 7 days notice, not 30 days (§60.675(g)).
60.9, Availability of information	Yes	
60.10, State authority	Yes	
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675 (c)(3) and (c)(4)), Method 9 observation may be reduced from 3 hours to 1 hour. Some affected facilities exempted from Method 9 tests (§60.675(h)).
60.12, Circumvention	Yes	
60.13, Monitoring requirements	Yes	
60.14, Modification	Yes	
60.15, Reconstruction	Yes	
60.16, Priority list	Yes	
60.17, Incorporations by reference	Yes	
60.18, General control device	No	Flares will not be used to comply with the emission limits.
60.19, General notification and reporting requirements	Yes	

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

§ 60.671 Definitions.

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

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

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

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

Building means any frame structure with a roof.

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

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

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

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

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

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

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

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

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

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

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

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

(b) Sand and Gravel.

- (c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.
- (d) Rock Salt.
- (e) Gypsum.
- (f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.
- (g) Pumice.
- (h) Gilsonite.
- (i) Talc and Pyrophyllite.
- (j) Boron, including Borax, Kernite, and Colemanite.
- (k) Barite.
- (l) Fluorospar.
- (m) Feldspar.
- (n) Diatomite.
- (o) Perlite.
- (p) Vermiculite.
- (q) Mica.
- (r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

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

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

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

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

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

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

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

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

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

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

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

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

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

§ 60.672 Standard for particulate matter.

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

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

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

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

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

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

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

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

(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

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

(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:

(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.

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

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

§ 60.673 Reconstruction.

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

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

§ 60.674 Monitoring of operations.

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

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

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

§ 60.675 Test methods and procedures.

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

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

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

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

(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:

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

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

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

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

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

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

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

(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 15 percent opacity; and

(ii) There are no more than 3 readings of 15 percent for the 1-hour period.

(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building

are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

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

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

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

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

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

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

(h) Initial Method 9 performance tests under §60.11 of this part and §60.675 of this subpart are not required for:

(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.

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

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

§ 60.676 Reporting and recordkeeping.

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

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

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

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

(2) For a screening operation:

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

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

(3) For a conveyor belt:

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

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

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

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

(b) [Reserved]

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

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

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

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).

(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).

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

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

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

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

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative

means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

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

Indiana Department of Environmental Management Office of Air Quality

Attachment B

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

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

§ 60.730 Applicability and designation of affected facility.

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

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

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

§ 60.731 Definitions.

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

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

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

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

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

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

§ 60.732 Standards for particulate matter.

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

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

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

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

§ 60.733 Reconstruction.

The cost of replacement of equipment subject to high temperatures and abrasion on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Calciner and dryer equipment subject to high temperatures and abrasion are: end seals, flights, and refractory lining.

§ 60.734 Monitoring of emissions and operations.

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

(b) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary calciner, a perlite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.

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

(d) The owner or operator of an affected facility subject to the provisions of this subpart who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

§ 60.735 Recordkeeping and reporting requirements.

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

(b) Each owner or operator who uses a wet scrubber to comply with §60.732 shall determine and record once each day, from the recordings of the monitoring devices in §60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.

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

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

(2) Any daily 2-hour average of the wet scrubber pressure drop determined as described in §60.735(b) that is less than 90 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or

(3) Each daily wet scrubber liquid flow rate recorded as described in §60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

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

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

§ 60.736 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

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

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

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

(c) During the initial performance test of a wet scrubber, the owner or operator shall use the monitoring devices of §60.734(d) to determine the average change in pressure of the gas stream across the scrubber and the average flowrate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of §60.735(c).

§ 60.737 Delegation of authority.

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

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

Appendix C

Fugitive Particulate Matter Emission Control Plan

- 1. Name and address of the source:**
 - a. United States Gypsum Company
12802 Deep Cut Lake Road
Shoals, IN 47581

- 2. Name and address of the owner or operator responsible for the execution of the control plan:**
 - a. Same as above.

- 3. Identification of all processes, operation, and areas which have the potential to emit fugitive particulate matter:**
 - a. Truck Loading
 - b. Conveyor Belts
 - c. Waste Wallboard Crushing/Hauling
 - d. Synthetic Gypsum Unloading/Hauling
 - e. Gypsum Storage Pile

- 4. A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.:**
 - a. A map is included as an attachment

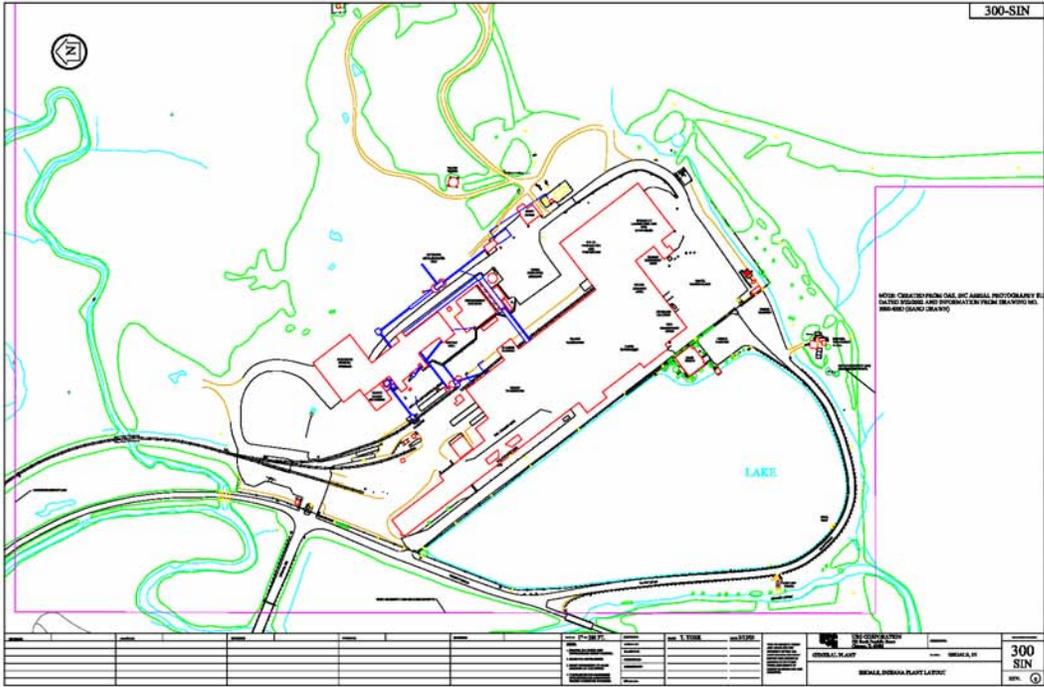
- 5. The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots:**
 - a. Over the road trucks load out daily from the facility. The number of trucks varies around 500/week and used paved roads. Employees travel the paved roads to the various employee parking lots located around the plant.

- 6. Type and quantity of material handled:**
 - a. Crushed gypsum rock is handled at this facility both in the wallboard manufacturing process and sold to outside customers, approximately 600,000 tons is used. Synthetic Gypsum is handled at this facility in the wallboard manufacturing process, approximately 400,000 tons are used. Cull wallboard is recycled in the wallboard shredder.

- 7. Equipment used to maintain aggregate piles:**
 - a. A front end loader is used to handle rock and synthetic gypsum. A forklift and front end loader are used to handle cull wallboard.

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

- a. The conveyor belts uses enclosed belts and transfer houses.
 - b. The synthetic gypsum unloading is done inside the synthetic gypsum shed and synthetic gypsum contains 10% moisture.
 - c. The paved roads are cleaned as necessary to control dust.
- 9. A specification of the dust suppressant material, such as oil or chemical including estimated frequency of application rates and concentrations:**
- a. The facility cleans/sweeps roads on an as needed basis.
- 10. A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure:**
- a. The facility does not utilize dust suppressant material.
- 11. A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures:**
- a. If a dusting issue occurs, it will be addressed using the method specified in number 9 above.
- 12. Other relevant data:**
- a. No other data.



Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	U. S. Gypsum Company
Source Location:	12802 Deep Cut Lake Road, Shoals, IN 47581
County:	Martin
SIC Code:	1499 and 3275
Permit Renewal No.:	T101-17814-00001
Permit Reviewer:	Kristen Layton

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from U. S. Gypsum Company relating to the operation of a stationary gypsum mining operation and gypsum wallboard and plaster products manufacturing plant.

History

On August 8, 2003, U. S. Gypsum Company submitted an application to the OAQ requesting to renew its operating permit. U. S. Gypsum Company was issued a Part 70 Operating Permit on May 24, 1999.

Permitted Emission Units and Pollution Control Equipment

- (1) The following gypsum ore mining and storage facilities:
 - (a) One (1) primary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting inside the mine.
 - (b) One (1) mine shaft conveyor, constructed in 1955, used to convey gypsum ore from the mine to the surface, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
 - (c) One (1) secondary crusher, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 140 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting inside the crusher building.
 - (d) Two (2) ore storage silos and (1) #1 Rock Belt, constructed in 1955, each bin with a capacity of 500 tons, a maximum throughput on the #1 Rock Belt of 250 tons per hour and a nominal throughput of 100 tons per hour due to downstream bottlenecking, and with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) Stacker Belt, constructed in 1955, with a maximum throughput of 250 tons per hour and a nominal throughput of 40 tons per hour due to downstream bottlenecking, (1) Ore storage pile, with a storage area of 3.75 acres, with a semicircular partial enclosure, and with particulate matter emissions exhausting to the atmosphere.

- (f) One (1) #2 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (2) The following bulk rock loading facilities:
- (a) One (1) #3 Rock Belt, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
 - (b) One (1) rock ore screen, constructed in 1955, with a nominal throughput of 140 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (c) One (1) crusher, constructed in 1955, with a maximum throughput of 110 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (d) One (1) #4 Rock Belt, with a maximum throughput of 140 tons per hour, one (1) bulk rock storage silo, constructed in 1955, with a maximum capacity of 375 tons, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) #5 Rock Belt, Cement Rock Loading, constructed in 1955, with a maximum throughput of 140 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting directly to the atmosphere.
- (3) The following rotary rock dryer facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 90 tons per hour, consisting of belt, screw, and bucket elevators, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) dryer feed bin, constructed in 1955, with a maximum capacity of 60 tons, with maximum throughput of 90 tons per hour, and with particulate matter emissions exhausting inside the building.
 - (c) One (1) natural gas or fuel oil-fired rotary rock dryer, constructed in 1955, with a heat input capacity of 14 million Btu per hour, with a maximum throughput of 90 tons per hour, with particulate matter emissions controlled by the Rock Dryer Dust Collector, identified as emission points 10, and exhausting to one (1) stack, identified as S-10.
- (4) The following glass batch production facilities:
- (a) A conveying system, constructed in 1966, consisting of screw conveyors, with a maximum throughput of 10 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) screening operation, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch System Dust Collector, identified as emission point 13, and exhausting to one (1) stack, identified as S-13.
 - (c) One (1) glass batch belt and storage bin, constructed in 1966, with a maximum throughput of 10 tons per hour, with a bin capacity of 85 tons, and with particulate matter emissions exhausting directly to the atmosphere.

- (d) One Glass Batch Loading Station, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions exhausting directly to the atmosphere.
 - (e) One (1) glass batch separator, constructed in 1966, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Glass Batch System Dust Collector, identified as emissions point 13, and exhausting to one (1) stack, identified as S-13.
 - (f) One (1) glass batch packing system, constructed in 1966 and modified in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
 - (g) One (1) glass batch airveyor receiving bin, constructed in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Glass Batch Receiving Bin Dust Collector, identified as emission point 40, and exhausting to one (1) stack, identified as S-40. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (5) The following landplaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 80 tons per hour, consisting of screw conveyors, with particulate matter emissions controlled by two (2) baghouses, identified as the #1 / #2 Raymond Mill Dust Collector and the #3 / #4 Raymond Mill Dust Collector, also identified as emission points 11 and 12, and exhausting to two (2) stacks, identified as S-11 and S-12, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #1, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (c) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #1, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, and with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (d) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #2, with a nominal throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 11, and exhausting to one (1) stack, identified as S-11.
 - (e) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #2, with a maximum capacity of 150 tons, and with particulate matter emissions controlled by the #1 / #2 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (f) One (1) Raymond grinding mill, constructed in 1955, identified as Raymond Mill #3, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.

- (g) One (1) Raymond Mill feed bin, constructed in 1955, identified as Raymond Feed Bin #3, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (h) One (1) Raymond grinding mill, constructed in 1980, identified as Raymond Mill #4, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (i) One (1) Raymond Mill feed bin, constructed in 1980, identified as Raymond Feed Bin #4, with a maximum capacity of 150 tons, with a nominal throughput of 20 tons per hour, and with particulate matter emissions controlled by the #3 / #4 Raymond Mill Dust Collector, identified as emissions point 12, and exhausting to one (1) stack, identified as S-12.
 - (j) One (1) Board Plant HRA landplaster receiving bin, constructed in 1986, with a capacity of 5 tons, with a maximum throughput of 2 tons per hour, with particulate matter emissions controlled by the HRA L.P. Air Conveyor Receiver Dust Collector, identified as emissions point 36, and exhausting to one (1) stack, identified as S-36. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (6) The following stucco production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 101.7 tons/hr, consisting of screw conveyors, with a semicircular partial enclosure, and with particulate matter emissions exhausting to associated processes or inside the building.
 - (b) One (1) calcining kettle, identified as MBR Kettle #1, constructed in 1999, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (c) One (1) kettle feed bin, identified as #1 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emission point 1, and exhausting to one (1) stack, identified as S-1.
 - (d) Three (3) natural gas or fuel oil-fired kettle burners, constructed in 1999, identified as #1 Kettle Burners, with a heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-41. Under the NSPS 40 CFR 60 Subpart UUU, this unit is considered an existing affected unit.
 - (e) One (1) hot pit, constructed in 1955 and modified in 1999, identified as Hot Pit #1, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1.
 - (f) One (1) calcining kettle, identified as Kettle #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.

- (g) One (1) kettle feed bin, identified as #2 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, and with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (h) One (1) natural gas or fuel oil-fired kettle burner, constructed in 1955, identified as #2 Kettle Burner, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-42.
- (i) One (1) hot pit, identified as Hot Pit #2, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by the #2 Kettle Dust Collector, identified as emissions point 2, and exhausting to one (1) stack, identified as S-2.
- (j) One (1) calcining kettle, identified as Kettle #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emissions point 3, and exhausting to one (1) stack, identified as S-3.
- (k) One (1) kettle feed bin, identified as #3 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emission point 3, and exhausting to one (1) stack, identified as S-3.
- (l) One (1) natural gas or fuel oil-fired kettle burner, identified as #3 Kettle Burner, constructed in 1955, with a heat input capacity of 12 million Btu per hour, and exhausting to one (1) stack, identified as S-43.
- (m) One (1) hot pit, identified as Hot Pit #3, constructed in 1955, with a maximum throughput of 12 tons per hour, with particulate matter emissions controlled by #3 Kettle Dust Collector, identified as emission point 3, and exhausting to one (1) stack, identified as S-3.
- (n) One (1) calcining kettle, identified as Kettle #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (o) One (1) kettle feed bin, identified as #4 Kettle Feed Bin, constructed in 1955, with a capacity of 60 tons, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (p) Two (2) natural gas or fuel oil-fired kettle burners, identified as #4 Kettle Burners, constructed in 1955, with a combined heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-44.
- (q) One (1) hot pit, identified as Hot Pit #4, constructed in 1955, with a maximum throughput of 15 tons per hour, with particulate matter emissions controlled by the #4 Kettle Dust Collector, identified as emissions point 4, and exhausting to one (1) stack, identified as S-4.
- (r) One (1) calcining kettle, identified as Kettle #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Kettle Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.

- (s) One (1) Kettle Feed Bin, identified as #5 Kettle Feed Bin, constructed in 1986, with a maximum capacity of 125 tons, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emission point 35, and exhausting to one (1) stack, identified as S-35.
 - (t) One (1) natural gas or fuel oil-fired kettle burner, identified as #5 Kettle Burner, constructed in 1986, with a heat input capacity of 20 million Btu per hour, and exhausting to one (1) stack, identified as S-5.
 - (u) One (1) hot pit, identified as Hot Pit #5, constructed in 1986, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by enclosure, and by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emissions point 5, and exhausting to one (1) stack, identified as S-5.
- (7) The following plaster production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 9 tons per hour, consisting of screw and belt conveyors and bucket elevator, with particulate matter emissions controlled by three (3) baghouses, identified as the B-Belt Dust Collector (emissions point 17), the Tail End of D-Belt Dust Collector (emission point 25), and the Plaster Packing Dust Collector (emission point 30), and exhausting to three (3) stacks, identified as S-17, S-25 and S-30, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) tube mill feed bin, constructed in 1955 and modified in 2001, with a maximum capacity of 60 tons, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) tube mill, constructed in 1955 and modified in 2001, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Tube Mill Dust Collector, identified as emissions point 14, and exhausting to one (1) stack, identified as S-14. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) Two (2) stucco storage bins, #0 North and #0 South Stucco Bins, constructed in 1955, each with a maximum capacity of 70 tons, each with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as the #0 North Stucco Storage Bin Dust Collector (emissions point 18), and the #0 South Stucco Storage Bin Dust Collector (emission point 19), and exhausting to two (2) stacks, identified as S-18 and S-19.
 - (e) One (1) stucco storage bin, #1 Stucco Bin, constructed in 1955, with a maximum capacity of 150 tons, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Stucco Storage Bin Dust Collector, identified as emissions point 20, and exhausting to one (1) stack, identified as S-20.
 - (f) One (1) sand bulk loading bin, constructed in 1996, with a maximum capacity of 60 tons, with a nominal throughput of 12 tons per hour, with particulate matter emissions controlled by Bulk Sand Bin Vent Dust Collector, identified as emissions point 51, and each exhausting to one (1) stack, identified as S-55. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

- (g) One (1) lime bulk loading bin, constructed in 1996 and modified in 2004, with a maximum capacity of 60 tons, with a nominal throughput of 3.6 tons per hour, with particulate matter emissions controlled by the Bulk Lime Bin Vent Dust Collector, identified as emissions point 52, and exhausting to one (1) stack, identified as S-56. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (h) Two (2) perlite ore storage bins, constructed in 1956, each with a maximum capacity of 250 tons and a maximum throughput of 1.6 tons per hour, and with particulate matter emissions exhausting to the atmosphere.
 - (i) One (1) natural gas or fuel oil-fired perlite ore expander, constructed in 1956, with a maximum throughput of 1.6 tons per hour, and a maximum heat input capacity of 2.3 million Btu per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the Perlite Expander Burner Cyclones (emission point 43), and exhausting to one (1) stack, identified as S-47.
 - (j) One (1) expanded perlite aggregate storage bin, with a maximum capacity of 24 tons, with a maximum throughput of 1.6 tons per hour, constructed in 1956, with particulate matter emissions controlled by the Perlite Dust Collector, identified as emissions point 29, and exhausting to one (1) stack, identified as S-29.
 - (k) Two (2) stucco bins, North and South Packing Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 60 tons, with a maximum throughput of 27 tons per hour, with particulate matter controlled by two (2) baghouses, identified as the North and South Packing Bin Dust Collectors, emission points 57 and 58, and exhausting to two (2) stacks, identified as S-61 and S-62.
 - (l) One (1) plaster mixer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
 - (m) One (1) plaster packer, constructed in 1955, with a maximum throughput of 27 tons per hour, with particulate matter emissions controlled by the Plaster Packing Dust Collector, identified as emissions point 30, and exhausting to one (1) stack, identified as S-30.
- (8) The following stucco handling and storage facilities:
- (a) A conveying system, constructed in 1955, consisting of belt and pneumatic conveyors, with a maximum throughput of 101.7 tons per hour, with particulate matter emissions controlled by five (5) baghouses, identified as the A-Belt Dust Collector (emissions point 16), the Head End of D-Belt Dust Collector (emission point 24), the Tail End of F Belt Dust Collector (emission point 28), the Stucco Air Conveyor Receiving Dust Collector (emission point 46), and the Stucco Air Conveyor Inlet Dust Collector (emission point 47), and exhausting to five (5) stacks, identified as S-16, S-24, S-28, S-50, and S-51, respectively. Some portions of the conveyor system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) Mill Surge bin, constructed in 1955, with a maximum throughput of 55 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15.
 - (c) Two (2) stucco storage bins, #4, and #5 Stucco Storage Bins, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour,

- with particulate matter emissions controlled by two (2) baghouses, identified as the #4 and #5 Stucco Storage Bin Dust Collectors (emissions points 22 and 23), and each exhausting to two (2) stacks, identified as S-22 and S-23, respectively.
- (d) Two (2) stucco storage bins, identified as the #2 Board Stucco Bin and #3 Stucco Storage Bin, constructed in 1955, each with a maximum capacity of 150 tons and a maximum throughput of 30 tons per hour and 27.5 tons per hour, respectively, with particulate matter emissions controlled by the #2 / #3 Stucco Storage Bin Dust Collector, identified as emissions point 31, and exhausting to one (1) stack, identified as S-31.
 - (e) One (1) stucco storage bin, identified as the 1000 Ton Stucco Storage Bin, constructed in 1998, with a maximum capacity of 1000 tons and a maximum throughput of 27.5 tons, with particulate matter emissions controlled by the 1000 Ton Stucco Storage Bin Vent Dust Collector, identified as emissions point 53, and exhausting to one (1) stack, identified as S-57. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (9) The following #1 wallboard production facilities:
- (a) A conveying system, constructed in 1955, with a maximum throughput of 40 tons per hour, consisting of screw and belt conveyors and airveyor and bucket elevators, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (b) One (1) stucco storage bin, constructed in 1955, with a maximum capacity of 40 tons and a maximum throughput of 25 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50.
 - (c) One (1) ball mill #1, constructed in 1998, with a maximum throughput of 1.8 tons per hour, with particulate matter emissions controlled by the Board Plant HRA Ball Mill Dust Collector, identified as emissions point 37, and exhausting to one (1) stack, identified as S-37. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) Five (5) dry additive feeders, constructed in 1955, with a maximum combined throughput of 4.5 tons per hour, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (e) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Board Line PST Belt Dust Collector, identified as emissions point 56, and exhausting to one (1) stack, identified as S-60 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (f) One (1) paper fiber hammermill, constructed in 1955, with a maximum throughput of 0.12 tons per hour, with particulate matter emissions controlled by two (2) cyclones, identified as the #1 Board Paper Fiber Hammer Mill Cyclones (emissions point 44) and exhausting to (1) stack, identified as S-48.
 - (g) One (1) gypsum panel slurry mixer, constructed in 1955 and replaced in 2002, with a maximum throughput of 46.5 tons per hour less water and 80.81 tons per hour with

water, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to (1) stack identified as S-50.

- (h) One (1) forming belt, constructed in 1955, with a maximum throughput of 40,000 square feet per hour, and exhausting inside the building.
- (i) One (1) natural gas-fired drying kiln, identified as #1 Board Kiln, constructed in 1955, identified as emissions point 41, with a heat input capacity of 55 million Btu per hour, and exhausting to one (1) stack, identified as S-45. No. 2 fuel oil will also be used as a supplemental fuel.
- (j) One (1) end saw, constructed in 1955, with a maximum throughput of 40,000 square feed of board per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
- (k) One (1) gypsum lay-in panel (GLIP) operation, constructed in 1995 and modified in 2004, with a maximum throughput of 28,800 square feet per hour, with particulate matter emissions controlled by the G.L.I.P. Saw Dust Collector, identified as emissions point 55, and exhausting to one (1) stack, identified as S-59, and consisting of
 - (1) Two (2) gypsum lay-in-panel (GLIP) saws; and
 - (2) One (1) adhesive operation.
- (10) The following #2 wallboard production facilities:
 - (a) A conveying system, constructed in 1964 with an airveyor added in 1995, with a maximum throughput of 60 tons per hour, consisting of screw and belt conveyors and bucket elevators and an air slide, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (b) One (1) stucco storage silo, constructed in 1964, with a maximum capacity of 40 tons and a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (c) One (1) HRA Airveyor and Receiving Bin, constructed in 1998, with a maximum throughput of 1.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line HRA Receiving Bin Dust Collector, identified as emissions point 59, and exhausting to one (1) stack, identified as S-63. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #2 Board Line PST Dust Collector, identified as emissions point 27, and exhausting to one (1) stack, identified as S-27 exhausting inside the building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

- (e) Five (5) dry additive feeders, constructed in 1964, with a combined maximum throughput of 4.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack, identified as S-32.
 - (f) One (1) gypsum panel slurry mixer, constructed in 1964, with a maximum throughput of 64.5 tons per hour less water and 80.81 tons per hour with water, with particulate matter emissions controlled by the #2 Board Line Stucco Bin Dust Collector, identified as emissions point 32, and exhausting to one (1) stack identified as S-32.
 - (g) One (1) forming belt, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, and exhausting inside the building.
 - (h) One (1) natural gas-fired drying kiln, identified as #2 Board Kiln, constructed in 1964, identified as emissions point 42, with a heat input capacity of 80 million Btu per hour, and exhausting to one (1) stack, identified as S-46. No. 2 fuel oil will also be used as a supplemental fuel.
 - (i) One (1) end saw, constructed in 1964, with a maximum throughput of 72,000 square feet per hour, with particulate matter emissions controlled by the North Board Plant End Saw Dust Collector, identified as emissions point 33, and exhausting to one (1) stack, identified as S-33. During backup situations, particulate matter emissions are controlled by the South Board Plant End Saw Dust Collector, identified as emissions point 34, and exhausting to one (1) stack, identified as S-34.
- (11) The Dunnage machine facilities:
- (a) One (1) Dunnage machine with saws, constructed in 1996, with a maximum throughput of 2400 square feet per hour, with particulate matter emissions controlled by the Dunnage Machine Dust Collector, identified as emissions point 50, and exhausting to (1) stack, identified as S-54.
- (12) The following synthetic gypsum and wallboard waste reclamation facilities:
- (a) One (1) three (3) walled synthetic gypsum storage shed, constructed in 1998, with a maximum throughput of 50 tons per hour, with a capacity of 0.64 acres, and with particulate matter emissions exhausting directly to the atmosphere.
 - (b) One (1) synthetic gypsum/waste reclaim belt, constructed in 1998, with a maximum throughput of 50 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting inside the building or directly to the atmosphere. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (c) One (1) synthetic gypsum storage bin, constructed in 1995, with a capacity of 60 tons and a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by moisture suppression, and exhausting inside the storage bin building. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
 - (d) One (1) natural gas or fuel oil-fired impact dryer mill, identified as the Williams Mill, constructed in 1995, with a maximum throughput of 50 tons per hour, with a heat input capacity of 30 million Btu per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

- (e) One (1) vibrating screens system, constructed in 1995, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.
- (f) One (1) waste wallboard shredder, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions exhausting inside a partial enclosure.
- (g) One (1) waste surge pile, constructed in 1995, with a nominal capacity of 5 tons per hour, with particulate matter emissions exhausting inside a partial enclosure. Under the NSPS 40 CFR 60 Subpart OOO, this unit is considered an existing affected unit.

Emission Units and Pollution Control Equipment Removed From the Source

Stucco Production Facilities

- (a) One (1) landplaster filter box, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as emissions point 26, and exhausting to one (1) stack, identified as S-26.
- (b) One (1) landplaster fines receiving system, with a maximum throughput of 6 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as emissions point 48, and exhausting to one (1) stack, identified as S-52.
- (c) The #2 and #3 hot pits will now vent to the #2 kettle dust collector and #3 kettle dust collector. The #2 hot pit dust collector and #3 hot pit dust collectors have been removed.

Synthetic Gypsum and Wallboard Waste Reclamation Facilities - This unit was a duplicate of the synthetic gypsum/waste reclaim belt and was therefore removed.

- (a) A drying and conveying system, contracted in 1995, consisting of belt and screw conveyors and bucket elevator, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or inside the building.

Insignificant Activities

- (a) Combustion related activities, including the following:
 - (1) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuels:
 - (A) Propane or liquefied petroleum gas or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
 - (B) Combustion source flame safety purging on startup.
- (b) Fuel dispensing activities, including the following:
 - (1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.
- (c) Routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

- (d) Water based activities, including the following:
 - (2) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (e) Repair activities, including the following:
 - (1) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
 - (2) Heat exchanger cleaning and repair.
- (f) Conveyors as follows:
 - (1) Underground conveyors.
- (g) Asbestos abatement projects regulated by 326 IAC 14-10.
- (h) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including the following:
 - (1) Catch tanks.
- (i) Activities associated with emergencies, including the following:
 - (1) Stationary fire pump engines.

Trivial Activities

- (a) Water related activities, including the following:
 - (1) Production of hot water for on-site personal use not related to any industrial or production process.
 - (2) Steam traps, vents, leaks, and safety relief valves.
 - (3) Pressure washing of equipment.
- (b) Combustion activities, including the following:
 - (1) Combustion emissions from propulsion of mobile sources.
- (c) Activities related to ventilation, venting equipment, and refrigeration, including the following:
 - (1) Ventilation exhaust, central chiller water systems, refrigeration, and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants.
 - (2) Air vents from air compressors.
- (d) Activities related to routine fabrication, maintenance, and repair of buildings, structures, equipment, or vehicles at the source where air emissions from those activities would not be associated with any commercial production process, including the following:
 - (1) Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both, of parking lots and roadways.
 - (2) Painting, including interior and exterior painting of buildings, and solvent use excluding degreasing operations utilizing halogenated organic solvents.
 - (3) Brazing, soldering, or welding operations and associated equipment.
 - (4) Nonasbestos insulation installation or removal.
- (e) Activities performed using hand-held equipment, including the following:

- (1) Drilling.
 - (2) Grinding.
 - (3) Machining wood, metal, or plastic.
 - (4) Routing.
 - (5) Sanding.
 - (6) Sawing.
 - (7) Surface grinding.
- (f) Housekeeping and janitorial activities and supplies, including the following:
- (1) Vacuum cleaning systems used exclusively for housekeeping or custodial activities, or both.
 - (2) Rest rooms and associated cleanup operations and supplies.
 - (3) Mobile floor sweepers and floor scrubbers.
- (g) Office related activities, including the following:
- (1) Office supplies and equipment.
 - (2) Photocopying equipment and associated supplies.
 - (3) Paper shredding.
 - (4) Blueprint machines, photographic equipment, and associated supplies.
- (h) Storage equipment and activities, including the following:
- (1) Pressurized storage tanks and associated piping for the following:
 - (A) Liquid petroleum gas (LPG).
 - (B) Natural gas.
 - (2) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.
 - (3) Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, vegetable oil, grease, wax, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
 - (4) Storage of drums containing maintenance raw materials.
- (i) Emergency and standby equipment, including the following:
- (1) Safety and emergency equipment except engine driven fire pumps, including fire suppression systems and emergency road flares.
 - (2) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment that could result from abnormal process operating conditions, including the following:
 - (A) Explosion relief vents, diaphragms, or panels.
 - (B) Safety relief valves.
- (j) Sampling and testing equipment and activities, including the following:
- (1) Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
 - (2) Environmental chambers not using HAP gases.
 - (3) Humidity chambers.
- (k) Activities generating limited amounts of fugitive dust, including the following:
- (1) Road salting and sanding.
- (l) Activities associated with production, including the following:
- (1) Air compressors and pneumatically operated equipment, including hand tools.
 - (2) Compressor or pump lubrication and seal oil systems.
- (m) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities, including the following:
- (1) Condensate drains for natural gas and landfill gas.

- (2) Manual loading and unloading operations.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T101-7691-00001 on May 24, 1999, the source has constructed or has been operating under the following approvals as well:

Permit Type	Permit Number	Issuance Date
Significant Source Modification	101-11204-00001	December 10, 1999
Administrative Amendment	101-11293-00001	January 24, 2000
Administrative Amendment	101-11873-00001	March 27, 2000
Significant Source Modification	101-14710-00001	November 30, 2001
Significant Permit Modification	101-14797-00001	December 17, 2001
Reopening	101-13422-00001	March 21, 2002`
Significant Source Modification	101-18012-00001	February 24, 2004
Significant Permit Modification	101-18106-00001	March 9, 2004
Administrative Amendment	101-20308-00001	November 22, 2004
Administrative Amendment	101-20497-00001	March 7, 2006
Administrative Amendment	101-24830-00001	June 28, 2007

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

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

- (a) The previous PSD minor limits were insufficient to render the requirements of 326 IAC 2-2 not applicable. Therefore, they have been modified.
- (b) The fuel oil sulfur content 0.3% by weight requirement has been replaced in the PSD Minor Limit by a 0.5% by weight since the source does not need to meet the lower requirement in order to render the requirements of 326 IAC 2-2 not applicable.
- (c) Per the request of the source, the D Sections have been consolidated into two (2) sections in order to make the permit easier to follow.
- (d) Some equipment descriptions have changed to reflect the maximum capacity instead of the nominal and some have been changed to show both the maximum capacity and the nominal.
- (e) New Source Performance Standards for Nonmetallic Mineral Process and for Calciners and Dryers in Mineral Industries have been incorporated and unit descriptions updated to reflect applicability.
- (f) For clarification purposes, the description of the G.L.I.P. operation has been modified to include the related adhesive operation which was previously considered and insignificant activity.

- (g) Testing conditions have been added to the permit for units with a potential to emit greater than 100 tons per year. These conditions have been added to demonstrate compliance with PSD minor limits.
- (h) A testing condition has been added for #1 Board Kiln. As part of this renewal, the source requested these units be permitted to utilize a larger amount of mold/water resistant additive than in the past. A test is required to demonstrate compliance with the emission factor used for the increased mold/water resistant additive usage. If there is not a significant change to the production process, this testing does not need to be repeated.
- (i) Some units not previously controlled by dust collectors have been vented to dust collectors.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Martin County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

- (a) Ozone Standards
 - (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
 - (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
 - (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
 - (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Martin County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Martin County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (c) Other Criteria Pollutants
Martin County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	54,124
PM ₁₀	54,130
SO ₂	568
VOC	56
CO	134
NO _x	272

HAPs	tons/year
Formaldehyde	4.75
Total HAPs	6.83

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM₁₀, SO₂, CO, and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

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

Federal Rule Applicability

- (a) **CAM:**
 Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE PM/PM10 (tons/year)	Controlled PTE PM/PM10 (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
<i>Rotary Rock Dryer Facilities</i>							
Rock Dryer	Dust Collector	Y	63.07	11.26	100	N	N
<i>Glass Batch Production Facilities</i>							
Screening operation	Dust Collector	Y	6.57	1.13	100	N	N
Glass batch separator	Dust Collector	Y	6.57	1.13	100	N	N
Glass batch packing system	Dust Collector	Y	6.57	5.07	100	N	N
Glass batch airveyor receiver	Dust Collector	Y	6.57	0.94	100	N	N
<i>Landplaster Production Facilities</i>							
Raymond mill #1	Dust Collector	Y	227.76	3.38	100	Y	N
Raymond mill #2	Dust Collector	Y	227.76	3.38	100	Y	N
Raymond mill #3	Dust Collector	Y	227.76	2.82	100	Y	N
Raymond mill #4	Dust Collector	Y	227.76	2.82	100	Y	N
Raymond mill feed bin #1	Dust Collector	Y	13.14	3.38	100	N	N

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE PM/PM10 (tons/year)	Controlled PTE PM/PM10 (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Raymond mill feed bin #2	Dust Collector	Y	13.14	2.82	100	N	N
Raymond mill feed bin #3	Dust Collector	Y	13.14	2.82	100	N	N
Raymond mill feed bin #4	Dust Collector	Y	13.14	2.82	100	N	N
Conveying system	Dust Collector	Y	911.04	3.38	100	Y	N
Board plant HRA landplaster receiving bin	Dust Collector	Y	1.31	0.845	100	N	N
<i>Stucco Production Facilities</i>							
MBR Kettle #1	Dust Collector	Y	6,321.22	4.51	100	Y	N
#1 Kettle feed bin	Dust Collector	Y	23.13	4.51	100	N	N
Hot pit #1	Dust Collector	Y	6,321.22	4.51	100	Y	N
Kettle #2	Dust Collector	Y	2,154.96	3.66	100	Y	N
#2 Kettle feed bin	Dust Collector	Y	7.88	3.66	100	N	
Hot pit #2	Dust Collector	Y	2,154.96	1.41	100	Y	N
Kettle #3	Dust Collector	Y	2,154.96	3.66	100	Y	N
#3 Kettle feed bin	Dust Collector	Y	7.88	3.66	100	N	N
Hot pit #3	Dust Collector	Y	2,154.96	1.41	100	Y	N
Kettle #4	Dust Collector	Y	2,693.70	3.66	100	Y	N
#4 Kettle feed bin	Dust Collector	Y	9.86	3.66	100	N	N
Hot pit #4	Dust Collector	Y	2,693.70	3.66	100	Y	N
Kettle #5	Dust Collector	Y	4,938.45	7.88	100	Y	N
#5 Kettle feed bin	Dust Collector	Y	18.07	0.84	100	N	N
Hot pit #5	Dust Collector	Y	18.07	7.88	100	N	N
<i>Plaster Production Facilities</i>							
Conveying system	Dust Collector	Y	17.73	0.57	100	N	N
Tube mill feed bin	Dust Collector	Y	6.57	1.41	100	N	N
Tube mill	Dust Collector	Y	6.57	2.25	100	N	N
#0 North stucco storage bin	Dust Collector	Y	13.14	0.19	100	N	N

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE PM/PM10 (tons/year)	Controlled PTE PM/PM10 (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
#0 South stucco storage bin	Dust Collector	Y	13.14	0.19	100	N	N
#1 Stucco storage bin	Dust Collector	Y	13.14	0.19	100	N	N
Sand bulk loading bin	Dust Collector	Y	7.88	0.56	100	N	N
Lime bulk loading bin	Dust Collector	Y	2.37	0.42	100	N	N
Perlite ore expander	(2) Cyclones	Y	14.72	7.36	100	N	N
Expanded perlite ore storage bin	Dust Collector	Y	1.05	1.69	100	N	N
North packing stucco storage bin	Dust Collector	Y	17.74	0.23	100	N	N
South packing stucco storage bin	Dust Collector	Y	17.74	0.23	100	N	N
Plaster mixer	Dust Collector	Y	17.74	5.07	100	N	N
Plaster packer	Dust Collector	Y	17.74	5.07	100	N	N
<i>Stucco Handling & Storage Facilities</i>							
Conveying system - A Belt	Dust Collector	Y	66.82	0.19	100	N	N
Conveying system - D belt	Dust Collector	Y	66.82	0.19	100	N	N
Conveying system - F belt	Dust Collector	Y	66.82	0.19	100	N	N
Mill surge bin	Dust Collector	Y	36.14	1.41	100	N	N
#4 Stucco storage bin	Dust Collector	Y	19.71	0.19	100	N	N
#5 Stucco storage bin	Dust Collector	Y	19.71	0.19	100	N	N
#2 Board stucco storage bin	Dust Collector	Y	18.07	1.69	100	N	N
#3 Board stucco storage bin	Dust Collector	Y	19.71	1.69	100	N	N
1000 Ton stucco storage bin	Dust Collector	Y	18.07	4.51	100	N	N
<i># 1 Wallboard Production Facilities</i>							
Conveying system	Dust Collector	Y	26.28	2.82	100	N	N
Stucco storage bin	Dust Collector	Y	16.43	2.82	100	N	N
Ball mill #1	Dust Collector	Y	20.50	0.68	100	N	N
Dry additive feeders	Dust Collector	Y	2.96	2.82	100	N	N

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE PM/PM10 (tons/year)	Controlled PTE PM/PM10 (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
PST system	Dust Collector	Y	13.14	0.28	100	N	N
Paper fiber hammermill	(2) Cyclones	Y	52.56	4.20	100	N	N
Gypsum panel slurry mixer	Dust Collector	Y	30.55	2.82	100	N	N
End saw	Dust Collector	Y	4,252.80	4.51	100	Y	N
GLIP	Dust Collector	Y	630.72	5.91	100	Y	N
#2 Wallboard Production Facilities							
Conveying system	Dust Collector	Y	39.42	2.82	100	N	N
Stucco storage silo	Dust Collector	Y	39.42	1.69	100	N	N
HRA airveyor & receiving bin	Dust Collector	Y	0.99	0.28	100	N	N
PST system	Dust Collector	Y	13.14	0.28	100	N	N
Dry additive feeders	Dust Collector	Y	2.96	2.82	100	N	N
Gypsum panel slurry mixer	Dust Collector	Y	42.38	2.82	100	N	N
End saw	Dust Collector	Y	2,52.80	4.51	100	Y	N
Dunnage Machine Facilities							
Dunnage machine	Dust Collector	Y	240.90	3.00	100	Y	N
Synthetic Gypsum & Wallboard Waste Reclamation Facilities							
Vibrating screens system	Dust Collector	Y	32.85	30.03	100	N	N
Williams mill	Dust Collector	Y	32.85	30.03	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to raymond mill #1, raymond mill #2, raymond mill #3, raymond mill #4, landplaster conveying system, MBR kettle #1, hot pit #1, kettle #2, hot pit #2, kettle #3, hot pit #3, kettle #4, hot pit #4, kettle #5, #1 Wallboard Line end saws, GLIP saws, #2 Wallboard Line end saws, and the dunnage machine for PM/PM10 upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

NSPS:

(b) This source is subject to the New Source Performance Standard for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart OOO, which is incorporated by reference as 326 IAC 12. This source is a fixed nonmetallic mineral processing plant with affected facilities which were constructed, reconstructed, or modified after August 31, 1983. Specifically, each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station constructed, reconstructed, or modified after August 31, 1983 is subject to 40 CFR 60, Subpart OOO. According to 40 CFR 60.671, storage bin means a facility for storage (including surge bins) of nonmetallic

minerals prior to further processing or loading. Therefore, receiving bins, feed bins, loading bins, storage sheds, storage bins, and surge piles are subject to this rule. The specific facilities include the following:

- (4) The following glass batch production facilities:
 - (f) One (1) glass batch airveyor receiving bin, constructed in 2006, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Glass Batch Receiving Bin Dust Collector, identified as emission point 40, and exhausting to one (1) stack, identified as S-40.
- (5) The following landplaster production facilities:
 - (j) One (1) Board Plant HRA landplaster receiving bin, constructed in 1986, with a capacity of 5 tons, with a maximum throughput of 2 tons per hour, with particulate matter emissions controlled by the HRA L.P. Air Conveyor Receiver Dust Collector, identified as emissions point 36, and exhausting to one (1) stack, identified as S-36.
- (6) The following stucco production facilities:
 - (s) One (1) Kettle Feed Bin, identified as #5 Kettle Feed Bin, constructed in 1986, with a maximum capacity of 125 tons, with a maximum throughput of 27.5 tons per hour, with particulate matter emissions controlled by the #5 Conical Kettle LP Feed Bin Dust Collector, identified as emission point 35, and exhausting to one (1) stack, identified as S-35.
- (7) The following plaster production facilities:
 - (b) One (1) tube mill feed bin, constructed in 1955 and modified in 2001, with a maximum capacity of 60 tons, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Mill Stucco Surge Bin Dust Collector, identified as emissions point 15, and exhausting to one (1) stack, identified as S-15.
 - (c) One (1) tube mill, constructed in 1955 and modified in 2001, with a maximum throughput of 10 tons per hour, with particulate matter emissions controlled by the Tube Mill Dust Collector, identified as emissions point 14, and exhausting to one (1) stack, identified as S-14.
 - (f) One (1) sand bulk loading bin, constructed in 1996, with a maximum capacity of 60 tons, with a nominal throughput of 12 tons per hour, with particulate matter emissions controlled by Bulk Sand Bin Vent Dust Collector, identified as emissions point 51, and each exhausting to one (1) stack, identified as S-55.
- (8) The following stucco handling and storage facilities:
 - (e) One (1) stucco storage bin, identified as the 1000 Ton Stucco Storage Bin, constructed in 1998, with a maximum capacity of 1000 tons and a maximum throughput of 27.5 tons, with particulate matter emissions controlled by the 1000 Ton Stucco Storage Bin Vent Dust Collector, identified as emissions point 53, and exhausting to one (1) stack, identified as S-57.

- (9) The following #1 wallboard production facilities:
- (c) One (1) ball mill #1, constructed in 1998, with a maximum throughput of 1.8 tons per hour, with particulate matter emissions controlled by the Board Plant HRA Ball Mill Dust Collector, identified as emissions point 37, and exhausting to one (1) stack, identified as S-37.
 - (e) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #1 Board Line PST Belt Dust Collector, identified as emissions point 56, and exhausting to one (1) stack, identified as S-60 exhausting inside the building.
- (10) The following #2 wallboard production facilities:
- (a) A conveying system, constructed in 1964 with an airveyor added in 1995, with a maximum throughput of 60 tons per hour, consisting of screw and belt conveyors and bucket elevators and an air slide, with particulate matter emissions controlled by the Stucco Air Conveyor Receiving Dust Collector, identified as emissions point 46, and exhausting to one (1) stack, identified as S-50. Some portions of the conveying system have a partial or total enclosure and exhaust to associated processes or inside the building.
 - (c) One (1) HRA Airveyor and Receiving Bin, constructed in 1998, with a maximum throughput of 1.5 tons per hour, with particulate matter emissions controlled by the #2 Board Line HRA Receiving Bin Dust Collector, identified as emissions point 59, and exhausting to one (1) stack, identified as S-63.
 - (d) One (1) PST System, constructed in 1995, with a maximum throughput of 20 tons per hour, with particulate matter emissions controlled by the #2 Board Line PST Dust Collector, identified as emissions point 27, and exhausting to one (1) stack, identified as S-27 exhausting inside the building.
- (12) The following synthetic gypsum and wallboard waste reclamation facilities:
- (b) One (1) synthetic gypsum/waste reclaim belt, constructed in 1998, with a maximum throughput of 50 tons per hour, with a semicircular partial enclosure, and with particulate matter emissions exhausting inside the building or directly to the atmosphere.
 - (c) One (1) synthetic gypsum storage bin, constructed in 1995, with a capacity of 60 tons and a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by moisture suppression, and exhausting inside the storage bin building.
 - (d) One (1) natural gas or fuel oil-fired impact dryer mill, identified as the Williams Mill, constructed in 1995, with a maximum throughput of 50 tons per hour, with a heat input capacity of 30 million Btu per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53.

- (e) One (1) vibrating screens system, constructed in 1995, with a maximum throughput of 50 tons per hour, with particulate matter emissions controlled by the Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector, identified as emissions point 49, and exhausting to one (1) stack, identified as S-53.

Nonapplicable portions of the NSPS will not be included in the permit. This source is subject to the following portions of Subpart OOO.

- (1) 40 CFR 60.670
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672
- (4) 40 CFR 60.673
- (5) 40 CFR 60.675
- (6) 40 CFR 60.676

- (c) This source is subject to the New Source Performance Standard for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart OOO, which is incorporated by reference as 326 IAC 12. This source is a fixed nonmetallic mineral processing plant with affected facilities which were constructed, reconstructed, or modified after August 31, 1983. The specific facilities include the following:

- (6) The following stucco production facilities:
 - (b) One (1) calcining kettle, identified as MBR Kettle #1, constructed in 1999, with a maximum throughput of 35.2 tons per hour, with particulate matter emissions controlled by the #1 Kettle Dust Collector, identified as emissions point 1, and exhausting to one (1) stack, identified as S-1.
 - (d) Three (3) natural gas or fuel oil-fired kettle burners, constructed in 1999, identified as #1 Kettle Burners, with a heat input capacity of 15 million Btu per hour, and exhausting to one (1) stack, identified as S-41.

Nonapplicable portions of the NSPS will not be included in the permit. This source is subject to the following portions of Subpart UUU.

- (1) 40 CFR 60.730
- (2) 40 CFR 60.731
- (3) 40 CFR 60.732
- (4) 40 CFR 60.733
- (5) 40 CFR 60.734
- (6) 40 CFR 60.735
- (7) 40 CFR 60.736
- (8) 40 CFR 60.737

- (d) The two (2) no. 2 fuel oil storage tanks, identified as T1 and T2, with storage capacities of 50,000 and 100,000 gallons, respectively, are not subject to the requirements of 40 CFR 60, Subpart K, Ka, or Kb, because fuel oil is either not considered a petroleum liquid or has a true maximum vapor pressure less than 3.5 kPa.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61 and 63, applicable to this source.

NESHAP:

- (f) Mold/water resistant additive usage in the #1 Board Kiln shall not exceed 2,000,000 pounds per 12 consecutive month period, with compliance determined at the end of each month. Compliance with this mold/water resistant additive usage limit is necessary to limit formaldehyde emissions to less than 10 tons per year and make the source an area source under Section 112 of the Clean Air Act. There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source is subject to 326 IAC 1-5-2.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2009. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 4-1 (Open Burning)

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 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

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 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this facility will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-2 (Prevention of Significant Deterioration)

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than 250 tons of PM and PM₁₀ per year, this source has elected to limit the source wide potential to emit as follows:

- (a) PM/PM₁₀ limits listed in the table below.

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
MBR Kettle #1, #1 Kettle Feed Bin, and Hot Pit #1	#1 Kettle Dust Collector	1 / S-1	1.03
Kettle #2, #2 Kettle Feed Bin, and Hot Pit #2	#2 Kettle Dust Collector	2 / S-2	0.84
Kettle #3, #3 Kettle Feed Bin, and Hot Pit #3	#3 Kettle Dust Collector	3 / S-3	0.84
Kettle #4, #4 Kettle Feed Bin, and Hot Pit #4	#4 Kettle Dust Collector	4 / S-4	0.84
Kettle #5 and Hot Pit #5	#5 Kettle Dust Collector	5 / S-5	1.80
Rotary Rock Dryer	Rock Dryer Dust Collector	10 / S-10	2.57
Landplaster Conveying System and #1 / #2 Raymond Mill and Raymond Mill Feed Bin #1	#1 / #2 Raymond Mill Dust Collector	11 / S-11	0.77
Landplaster Conveying System and #3 / #4 Raymond Mill and Raymond Mill Feed Bin #2 - #4	#3 / #4 Raymond Mill Dust Collector	12 / S-12	0.64
Glass Batch Screening Operation and Glass Batch Separator	Glass Batch System Dust Collector	13 / S-13	0.26
Tube Mill	Tube Mill Dust Collector	14 / S-14	0.51
Tube Mill Feed Bin and Mill Surge Bin	Mill Stucco Surge Bin Dust Collector	15 / S-15	0.32
Stucco Handling and Storage Facilities Conveying System	A-Belt Dust Collector	16 / S-16	0.04
Plaster Conveying System	B-Belt Dust Collector	17 / S-17	0.04
#0 North Stucco Bin	#0 North Stucco Bin Dust Collector	18 / S-18	0.04
#0 South Stucco Bin	#0 South Stucco Bin Dust Collector	19 / S-19	0.04
#1 Stucco Bin	#1 Stucco Bin Dust Collector	20 / S-20	0.04
#4 Stucco Storage Bin	#4 Stucco Storage Bin Dust Collector	22 / S-22	0.04
#5 Stucco Storage Bin	#5 Stucco Storage Bin Dust Collector	23 / S-23	0.04
Stucco Handling and Storage Facilities Conveying System	Head End of D-Belt Dust Collector	24 / S-24	0.04
Plaster Conveying System	D-Belt Dust Collector	25 / S-25	0.04

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
PST System	#2 Board Line PST Dust Collector	27 / S-27	0.06
Stucco Handling and Storage Facilities Conveying System	Tail End of F Belt Dust Collector	28 / S-28	0.32
Expanded Perlite Aggregate Storage Bin	Perlite Dust Collector	29 / S-29	0.39
Glass Batch Packing System, Plaster Conveying System, Plaster Mixer, and Plaster Packer	Plaster Packing Dust Collector	30 / S-30	1.16
#2 and #3 Stucco Storage Bins	#2/ #3 Stucco Storage Bin Dust Collectors	31 / S-31	0.39
Stucco Storage Silo, Dry Additive Feeders, and Gypsum Panel Slurry Mixer	#2 Board Line Stucco Bin Dust Collector	32 / S-32	0.39
#1 Wallboard and #2 Wallboard End Saws	North and South Board Plant End Saw Dust Collectors	33 / S-33 & 34 / S-34	1.03
#5 Kettle Feed Bin	#5 Conical Kettle LP Feed Bin Dust Collector	35 / S-35	0.19
Board Plant HRA Landplaster Receiving Bin	HRA L.P. Air Conveyor Receiver Dust Collector	36 / S-36	0.19
Ball Mill #1	Board Plant HRA Ball Mill Dust Collector	37 / S-37	0.15
Glass Batch Airveyor Receiving Bin	Mill Glass Batch Receiving Bin Dust Collector	40 / S-40	0.21
#2 Board Kiln		42 / S-46	2.46
Perlite Ore Expander	Perlite Expander Burner Cyclones	43 / S-47	1.68
Paper Fiber Hammermill	#1 Board Paper Fiber Hammer Mill Cyclones	44 / S-48	0.96
Stucco Handling and Storage Facilities Conveying System, #1 Wallboard Conveying System, Stucco Storage Bin, 5 Dry Additive Feeders, Gypsum Panel Slurry Mixer, and #2 Wallboard Conveying System	Stucco Air Conveyor Receiving Dust Collector	46 / S-50	0.64
Stucco Handling and Storage Facilities Conveying System	Stucco Air Conveyor Inlet Dust Collector	47 / S-51	0.10
Vibrating Screen System and Williams Mill	Williams Mill for Synthetic Gypsum and Waste Reclaim Dust Collector	49 / S-53	6.86

Unit ID	Control Device ID	Emission Point / Stack Number	PM/PM10 Emission Limit (lbs/hr)
Dunnage Machine	Dunnage Machine Dust Collector	50 / S-54	0.69
Sand Bulk Loading Bin	Bulk Sand Bin Vent Dust Collector	51 / S-55	0.13
Lime Bulk Loading Bin	Bulk Lime Bin Vent Dust Collector	52 / S-56	0.10
1000 Ton Stucco Storage Bin	1000 Ton Stucco Storage Bin Vent Dust Collector	53 / S-57	1.03
G.L.I.P. Operation	G.L.I.P. Saw Dust Collector	55 / S-59	1.35
PST System	#1 Board Line PST Belt Dust Collector	56 / S-60	0.06
North Packing Stucco Storage Bin	North Packing Bin Dust Collector	57 / S-61	0.05
South Packing Stucco Storage bin	South Packing Bin Dust Collector	58 / S-62	0.05
HRA Airveyor and Receiving Bin	#2 Board Line HRA Receiving Bin Dust Collector	59 / S-63	0.06
Synthetic Gypsum Storage Bin	Moisture Suppression		0.66
Primary Crusher			0.03

- (b) The plant wide fuel oil usage shall not exceed 3,000 kgal per 12 consecutive month period, with compliance determined at the end of each month. In addition, the fuel oil shall not exceed five-tenths (0.5%) sulfur content by weight.
- (c) The PM/PM₁₀ limits for the #1 Board Kiln shall be as follows:
 - (1) When not using mold/water resistant additives:
 - (a) The PM emissions from the #1 Board Kiln shall not exceed 1.32 lbs/hr.
 - (b) The PM₁₀ emissions from the #1 Board Kiln shall not exceed 1.62 lbs/hr.
 - (2) When using mold/water resistant additives:
 - (a) Mold/water resistant additive usage in the #1 Board Kiln shall not exceed 2,000,000 pounds per 12 consecutive month period, with compliance determined at the end of each month. Compliance with this limit shall limit Formaldehyde emissions to less than ten (10) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 20 and 40 CFR 63 not applicable.
 - (b) The PM emissions from the #1 Board Kiln shall not exceed 11.52 lbs/hr.
 - (c) The PM₁₀ emissions from the #1 Board Kiln shall not exceed 11.82 lbs/hr.

Compliance with the above limits, in conjunction with the potential to emit PM/PM10 from other emission units and insignificant activities at the source, shall limit the PM/PM10 emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

State Rule Applicability – Individual Facilities

Mining, Storage, and Bulk Rock Loading Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing process), the following limits shall apply:

Emission Unit	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
Primary Crusher	140	54.72
Mine Shaft Conveyor	140	54.72
Secondary Crusher	140	54.72
Rock Ore Screen	140	54.72
Crusher	110	52.24

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

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

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

- (b) Pursuant to 326 IAC 6-3-2(e)(3), when the process weight rate exceeds 200 tons per hour, the PM emissions may exceed the limit determined by the equation above, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.
- (c) The #1 rock belt (2) ore storage silos, stacker belt, #2 rock belt, #3 rock belt, #5 rock belt and bulk rock loading station, and #4 rock belt and storage silo each have a potential to emit of less than 0.551 pound per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Rock Dryer, Glass Batch, Landplaster, Stucco, Plaster, Stucco Handling & Storage, #1 Wallboard, #2 Wallboard, Dunnage Machine, and Synthetic Gypsum & Wallboard Waste Reclamation Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2, the Permittee shall comply with the PM limits, when operating at the associated process weight rates, as shown in the table below:

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
Rotary Rock Dryer Facilities	Rotary rock dryer	10 / S-10	90	50.23
Glass Batch Production Facilities	Conveying system		10	19.18
	Screening operation	13 / S-13	10	19.18
	Glass batch belt & storage bin		10	19.18

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	Glass batch loading station		10	19.18
	Glass batch separator	13 / S-13	10	19.18
	Glass batch packing system	30 / S-30	10	19.18
	Glass batch airveyor receiving bin	40 / S-40	10	19.18
Landplaster Production Facilities	Conveying system	11 / S-11 & 12 / S-12	80	49.06
	Raymond mill #1	11 / S-11	20	30.51
	Raymond feed bin #1	11 / S-11	20	30.51
	Raymond mill #2	11 / S-11	20	30.51
	Raymond feed bin #2	12 / S-12	20	30.51
	Raymond mill #3	12 / S-12	20	30.51
	Raymond feed bin #3	12 / S-12	20	30.51
	Raymond mill #4	12 / S-12	20	30.51
Stucco Production Facilities	Conveying system		101.7	51.45
	Kettle #1	1 / S-1	35.2	41.37
	Kettle feed bin #1	1 / S-1	35.2	41.37
	Hot pit #1	1 / S-1	35.2	41.37
	Kettle #2	2 / S-2	12	21.67
	Kettle feed bin #2	2 / S-2	12	21.67
	Hot pit #2	2 / S-2	12	21.67
	Kettle #3	3 / S-3	12	21.67
	Kettle feed bin #3	3 / S-3	12	21.67
	Hot pit #3	3 / S-3	12	21.67
	Kettle #4	4 / S-4	15	25.16
	Kettle feed bin #4	4 / S-4	15	25.16
	Hot pit #4	4 / S-4	15	25.16
	Kettle #5	5 / S-5	27.5	37.77
	Kettle feed bin #5	35 / S-35	27.5	37.77
Hot pit #5	5 / S-5	27.5	37.77	
Plaster Production Facilities	Conveying system	17 / S-17, 25 / S-25, & 30 / S-30	9	17.87
	Tube mill feed bin	15 / S-15	10	19.18
	Tube mill	14 / S-14	10	19.18
	#0 North stucco storage bins	18 / S-18	20	30.51
	#0 South stucco storage bins	19 / S-19	20	30.51

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	#1 Stucco storage bin	20 / S-20	20	30.51
	Sand bulk loading bin	51 / S-55	12	21.67
	Perlite ore expander	43 / S-47	1.6	5.62
	North plaster packing bin	57 / S-61	27	37.31
	South plaster packing bin	58 / S-62	27	37.31
	Plaster mixer	30 / S-30	27	37.31
	Plaster packer	30 / S-30	27	37.31
Stucco Handling & Storage Facilities	Conveying system	16 / S-16, 24 / S-24, 28 / S-28, 46 / S-50, & 47 / S-51	101.7	51.45
	Mill surge bin	15 / S-15	55	45.47
	#2 Stucco storage bin	31 / S-31	30	39.96
	#3 Stucco storage bin	31 / S-31	27.5	37.77
	#4 Stucco storage bin	22 / S-22	30	39.96
	#5 Stucco storage bin	23 / S-23	30	39.96
	1000 Ton stucco storage bin	53 / S-57	27.5	37.77
#1 Wallboard Production Facilities	Conveying system	46 / S-50	40	42.53
	Stucco storage bin	46 / S-50	25	35.43
	Ball Mill #1	37 / S-37	1.8	6.08
	Dry additive feeders	46 / S-50	4.5	11.23
	PST system	56 / S-60	20	30.51
	Paper fiber hammermill	44 / S-48	0.12	0.99
	Gypsum panel slurry mixer	46 / S-50	80.81	49.16
	Kiln #1	41 / S-45	49.5	56.00
	End saw	33 / S-33 & 34 / S-34	46.5	43.90
	Gypsum lay-in panel (GLIP) saws	55 / S-59	46.5	43.90
#2 Wallboard Production Facilities	Conveying system	46 / S-50	60	46.29
	Stucco storage silo	32 / S-32	60	46.29
	PST system	27 / S-27	20	30.51

Process Area	Emission Unit	Emission Point / Stack Number	Process Weight Rate (ton/hr)	PM Limit (lbs/hr)
	Dry additive feeders	32 / S-32	4.5	11.23
	Gypsum panel slurry mixer	32 / S-32	80.81	49.16
	Kiln #2	42 / S-46	80.81	49.16
	End saw	33 / S-33 & 34 / S-34	64.5	43.9
Dunnage Machine Facilities	Dunnage Machine	50 / S-54	55	45.47
Synthetic Gypsum & Wallboard Waste Reclamation Facilities	Synthetic gypsum / waste reclaim belt	N/A	50	44.58
	Waste wallboard shredder	N/A	20	30.51
	Vibrating screens system	49 / S-53	50	44.58
	Williams Mill	49 / S-53	50	44.58
	Synthetic gypsum storage bin	N/A	50	44.58

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

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

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

and

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

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

- (b) The rotary rock dryer conveying system, rotary rock dryer feed bin, HRA L.P. Air Conveyor, 2 perlite ore storage bins, expanded perlite aggregate storage bin, lime bulk loading bin each have a potential to emit of less than 0.551 pound per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the #1 and #2 Wallboard kilns, calcining kettles #1 - #5, the rotary rock dryer, perlite expander, and the Williams Mill shall not exceed five-tenths (0.5) pound per million Btu.

326 IAC 8-1-6 (BACT)

The #1 and #2 Wallboard kilns each have a potential to emit greater than twenty-five (25) tons per year. However, the kilns were constructed prior to January 1, 1980. Therefore, 326 IAC 8-1-6 is not applicable to the kilns.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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 and determination requirements applicable to this source are as follows:

Mining, Storage, and Bulk Rock Loading Facilities

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

This monitoring condition is necessary because PM/PM10 for the Mining, Storage, and Bulk Rock Loading facilities must be properly controlled to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), and 326 IAC 2-7 (Part 70)).

Rock Dryer, Glass Batch, Landplaster, Stucco, Plaster, Stucco Handling & Storage, #1 Wallboard, #2 Wallboard, Dunnage Machine, and Synthetic Gypsum & Wallboard Waste Reclamation Facilities

(1) Testing Requirements

In order to demonstrate compliance with Condition D.1.1, the Permittee shall:

- (a) For the purposes of PM and PM-10 compliance stack testing, the units at this source are grouped as follows:

Group A:

Dust Collector

#1/#2 Raymond Mill Dust Collector

#3/#4 Raymond Mill Dust Collector

Units

#1 Raymond Mill
#1 Raymond Mill Feed Bin
#2 Raymond Mill
Conveying System
#3 Raymond Mill
#2 Raymond Mill Feed Bin
#3 Raymond Mill Feed Bin
#4 Raymond Mill
#4 Raymond Mill Feed Bin
Conveying System

Group B:

Dust Collector

#1 Kettle Dust Collector

#2 Kettle Dust Collector

#3 Kettle Dust Collector

#4 Kettle Dust Collector

#5 Kettle Dust Collector

Units

MBR Kettle #1
#1 Kettle Feed Bin
Hot Pit #1
Kettle #2
#2 Kettle Feed Bin
Hot Pit #2
Kettle #3
#3 Kettle Feed Bin
Hot Pit #3
Kettle #4
#4 Kettle Feed Bin
Hot Pit #4
Kettle #5
Hot Pit #5

Group C:

Dust Collector

North Board Plant End Saw Dust Collector

South Board Plant End Saw Dust Collector

Units

#1 Wallboard Line End Saw
#2 Wallboard Line End Saw
#1 Wallboard Line End Saw
#2 Wallboard Line End Saw

- (b) The Permittee shall perform PM and PM-10 testing on one (1) dust collector from each of Groups A, B, and C within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the prior valid compliance demonstration. The source will test the dust collector for which the

longest period of time has passed since the last valid compliance test. The first complete PM/PM-10 testing of Group B shall not include #1 Kettle Dust Collector. Testing shall be conducted in accordance with Section C- Performance Testing. PM-10 includes filterable and condensable PM.

- (c) Perform PM and PM-10 testing of the G.L.I.P. Saw Dust Collector within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM.
 - (d) Perform PM and PM-10 testing of the #1 Board Kiln within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008. This testing shall be conducted utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. PM-10 includes filterable and condensable PM.
- (2) Sulfur Dioxide (SO₂)
Compliance with Condition D.2.1 and D.2.3 shall be determined using the following:
- (a) Pursuant to 326 IAC 3-7-4 (Sulfur Dioxide Emissions and Sulfur Content), the Permittee shall demonstrate the fuel oil sulfur content does not exceed 0.5% by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (3) Particulate Control (Baghouse)
- (a) In order to comply with Conditions D.2.1 and D.2.2 the baghouses 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 46, 47, 49, 50, 51, 53, 55, 56, 57, 58 and 59 for particulate control shall be in operation and control emissions at all times that the associated emissions units are in operation.
 - (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (4) **Particulate Control (Cyclone)**
In order to comply with Conditions D.2.1 and D.2.2, the cyclones 43 and 44 for particulate control shall be in operation and control emissions at all times that the associated emission units are in operation.
- (5) **Visible Emissions Notations**
- (a) Visible emission notations of the points 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 43, 44, 46, 47, 49, 50, 51, 52, 53, 55, 56, 57, 58 and 59 stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (6) **Parametric Monitoring**
The Permittee shall record the pressure drop across each baghouse used in conjunction with emission points 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 46, 47, 49, 50, 51, 53, 55, 56, 57, 58 and 59 at least once per day when the associated process is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.
- The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (7) **Broken or Failed Bag Detection**
- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

- (8) Cyclone Failure Detection
In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

These compliance determination and monitoring conditions are necessary because the baghouses and cyclones for the Rock Dryer, Glass Batch, Landplaster, Stucco, Plaster, Stucco Handling & Storage, #1 Wallboard, #2 Wallboard, Dunnage Machine, and Synthetic Gypsum & Wallboard Waste Reclamation facilities must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 7-1.1-2 and 326 IAC 2-7 (Part 70).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on August 20, 2003. Additional information was received on August 28 and September 10 and 25, 2008.

Conclusion

The operation of this gypsum mining operation and gypsum wallboard and plaster products manufacturing plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T101-17814-00001.

Emissions Summary

Potential to Emit Non-Fugitive Emissions (TPY)								
Process	PM	PM-10	SO₂	VOC	NO_x	CO	Formaldehyde	Total HAPs
	non-fugitive	non-fugitive						
Mining & Storage Facilities	31.97	31.97	-	-	-	-	-	-
Bulk Rock Loading Facilities	63.34	63.34	-	-	-	-	-	-
Rotary Rock Dryer Facilities	63.34	63.34	-	-	-	-	-	-
Natural Gas Combustion	2.12	8.50	0.67	6.15	111.82	93.93	0.08	2.11
Fuel Oil Combustion	15.97	15.97	567.09	2.72	159.74	39.94	-	0.05
Glass Batch Production Facilities	32.85	32.85	-	-	-	-	-	-
Landplaster Production Facilities	1,875.95	1,875.95	-	-	-	-	-	-
Stucco Production Facilities	47,722.40	47,722.40	-	-	-	-	-	-
Plaster Production Facilities	168.32	168.32	-	-	-	-	-	-
Stucco Handling & Storage Facilities	465.48	465.48	-	-	-	-	-	-
#1 Wallboard Production Facilities	3,245.93	3,245.93	-	3.00	-	-	-	-
Kilns (process emissions)	30.01	30.01	-	44.10	-	-	4.67	4.67
#2 Wallboard Production Facilities	98.88	98.88	-	-	-	-	-	-
Dunnage Machine Facilities	240.90	240.90	-	-	-	-	-	-
Wallboard Waste Reclamation Facilities	66.36	66.36	-	-	-	-	-	-
Gypsum Pile Transfers	0.12	0.06	-	-	-	-	-	-
Total Non-Fugitive Emissions	54,123.96	54,130.27	567.77	55.97	271.57	133.87	4.75	6.83

Limited Emissions (TPY)								
Process	PM	PM-10	SO₂	VOC	NO_x	CO	Formaldehyde	Total HAPs
	non-fugitive	non-fugitive						
Mining & Storage Facilities	16.80	16.80	-	-	-	-	-	-
Bulk Rock Loading Facilities	29.21	29.21	-	-	-	-	-	-
Rotary Rock Dryer Facilities	12.45	12.45	-	-	-	-	-	-
Natural Gas Combustion	2.12	8.50	0.67	6.15	111.82	93.93	0.08	2.11
Fuel Oil Combustion	3.00	3.00	106.50	0.51	30.00	7.50	-	0.05
Glass Batch Production Facilities	13.70	13.70	-	-	-	-	-	-
Landplaster Production Facilities	7.04	7.04	-	-	-	-	-	-
Stucco Production Facilities	24.22	24.22	-	-	-	-	-	-
Plaster Production Facilities	16.12	16.12	-	-	-	-	-	-
Stucco Handling & Storage Facilities	11.58	11.58	-	-	-	-	-	-
#1 Wallboard Production Facilities	15.58	15.58	-	3.00	-	-	-	-
Kilns (process emissions)	30.01	30.01	-	44.10	-	-	4.67	4.67
#2 Wallboard Production Facilities	2.25	2.25	-	-	-	-	-	-
Dunnage Machine Facilities	3.00	3.00	-	-	-	-	-	-
Wallboard Waste Reclamation Facilities	43.77	43.77	-	-	-	-	-	-
Gypsum Pile Transfers	0.12	0.06	-	-	-	-	-	-
Total Non-Fugitive Emissions	230.97	237.29	107.17	53.76	141.82	101.43	4.75	6.83

PM/PM10 - Ore Mining & Storage

POINT SOURCE EMISSION	Exhaust Point	Capacity TON/HR	Emission Factor LB PM/TON PROCESSED	% Reduction for Enclosure %	Hours	Potential to Emit PM/PM10	Potential to Emit PM/PM10	Reduced PM/PM10 Emissions	326 IAC 6-3 LIMIT	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
						LB/HR	TPY	TPY	LB/HR			
Primary Crusher	Exhaust inside mine	140	0.025	99.00%	8760	3.5	15.33	0.15	54.72	Fire 6.25	SCC3-05-020-02	NF
Secondary Crusher	enclosure / exhaust inside mine	140	0.025	0.00%	8760	3.5	15.33	15.33	54.72	Fire 6.25	SCC3-05-020-02	NF
Mine Shaft Conveying	Exhaust inside mine	140	0.003	95.00%	8760	0.42	1.84	0.09	54.72	AP-42	Chapter 11.19.2-2	F
#1 Rock Belt (2) Ore Storage Silos	Partial Enclosure	100	0.003	0.00%	8760	0.3	1.31	1.31	51.28	AP-42	Chapter 11.19.2-2	NF
Stacker Belt	Snorkel	40	0.003	0.00%	8760	0.12	0.53	0.53	42.53	AP-42	Chapter 11.19.2-2	F
#2 Rock Belt	enclosure / Exhaust to atmosphere	140	0.003	0.00%	8760	0.42	1.84	1.84	54.72	AP-42	Chapter 11.19.2-2	F
Total Ore Mining and Storage						8.26	36.18	19.25				
Total Non-Fugitive						7.30	31.97	16.80				

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Note: The #1 rock belt (2) ore storage silos, stacker belt, and #2 rock belt have a potential to emit of less than 0.551 pounds per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Note: There are additional fugitive PM/PM10 emissions from mining operations. These are not calculated since they are not counted towards the PSD threshold.

Methodology

Potential to Emit PM (tpy) = capacity (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

Reduced PM/PM10 (tpy) = capacity (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb * (1 - reduction for enclosure%)

PM/PM10 - Bulk Rock Loading

POINT SOURCE EMISSION	Exhaust Point	Capacity TON/HR	Emission Factor LB PM/TON PROCESSED	Hours	PM/PM10 Emissions LB/HR	PM/PM10 Emissions TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
# 3 Rock Belt	Partial or Total enclosure / exhaust to atmosphere	140	0.003	8760	0.42	1.84	54.72	AP-42	Chapter 11.19.2-2	F
Rock Ore Screen	Partial enclosure / Exhaust inside building	140	0.025	8760	3.50	15.33	54.72	Fire 6.25	SCC3-05-020-02	NF
Crusher	Partial enclosure / Exhaust to atmosphere	110	0.025	8760	2.75	12.05	52.24	Fire 6.25	SCC3-05-020-02	NF
#5 Rock Belt Loading Station	Uncontrolled Emissions / Exhaust to atmosphere	140	0.0001	8760	0.01	0.06	54.72	Fire 6.25	SCC3-05-020-32	F
#4 Rock Belt Storage Silo	partial enclosure	140	0.003	8760	0.42	1.84	54.72	AP-42	Chapter 11.19.2-2	NF
Total					7.10	31.12				
Total Non-Fugitive					6.67	29.21				

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Note: The #3 rock belt, #5 rock belt and bulk rock loading station, and #4 rock belt and storage silo have a potential to emit of less than 0.551 pounds per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Methodology

Potential to Emit PM (tpy) = capacity (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

PM/PM10 - Rotary Rock Dryer Facilities

POINT SOURCE EMISSION	Exhaust Point	Capacity	Emission Factor	Hours	Potential to Emit PM/PM10	Potential to Emit PM/PM10	326 IAC 6-3 LIMIT	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
		TPY	LB/TON		LB/HR	TPY	LB/HR			
Conveying System	Partial/Total Enclosure	90	0.003	8760	0.27	1.18	50.23	AP-42	Chapter 11.19.2-2	F
Feed Bin	Building enclosure	90	0.003	8760	0.27	1.18	50.23	AP-42	Chapter 11.19.2-2	NF

Subtotal: 0.54 2.37
Subtotal Non-Fugitive: 0.27 1.18

Note: The conveying system and feed bin have a potential to emit of less than 0.551 pounds per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Methodology

Potential to Emit PM (tpy) = capacity (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

POINT SOURCE EMISSION	Emission Point / Stack Number	Air Flow	Grain Loading	Control Efficiency	Hours	Controlled PM/PM10	Controlled PM/PM10	Capacity	Emission Factor	Potential to Emit PM/PM10	Potential to Emit PM/PM10	Source of Emission Factor		326 IAC 6-3 LIMIT
		SCFM	GR/DSCF	%		LB/HR	TPY		TON/HR	LB/TON	lb/hr			TPY
Rock Dryer	10 / S-10	20000	0.015	99.00%	8760	2.57	11.26	90	0.16	14.40	63.07	AP-42	Chapter 11-16-2	50.23

Subtotal: 2.57 11.26 63.07

Total for Rotary Rock Dryer: 3.11 13.63 63.61

Total for Non-Fugitive from Rotary Rock Dryer: 2.84 12.45 63.34

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * (1-Control Efficiency %)

PM/PM10 - Glass Batch Production Facilities

POINT SOURCE EMISSION	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
Plaster Packing Dust Collector - glass batch packing system	30 / S-30	9000	0.015	99.00%	8760	1.16	5.07	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
Mill Glass Batch Receiving Bin Dust Collector	40 / S-40	2500	0.01	99.00%	8760	0.21	0.94	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
Glass Batch System Dust Collector - screening operation	13 / S-13	2000	0.015	99.00%	8760	0.26	1.13	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
Glass Batch System Dust Collector - glass batch separator	13 / S-13	2000	0.015	99.00%	8760	Vents to S-13	0.00	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
Subtotal:						1.63	7.13				26.28			

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)
 Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)
 Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

POINT SOURCE EMISSION	Exhaust Point	Capacity TON/HR	Emission Factor lb PM / ton	Hours	Potential to Emit PM/PM10 LB/HR	Potential to Emit PM/PM10 TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
Conveying	Partial Enclosure / Exhaust to Process or Inside Building	10	0.15	8760	1.5	6.57	19.18	Fire 6.25	SCC3-05-015-04	F
Storage Bin	Partial Enclosure	10	0.15	8760	1.5	6.57	19.18	Fire 6.25	SCC3-05-015-04	NF
Glass Batch Truck Loading	Exhaust to Atmosphere	10	0.15	8760	1.5	6.57	19.18	Fire 6.26	SCC3-05-015-05	F
Subtotal:					4.50	19.71				
Subtotal Non-Fugitive:					1.50	6.57				
Total:					26.84					
Total Non-Fugitive from Glass Production:					13.70					

Methodology

Potential to Emit PM (tpy) = capacity (ton/hr) * emission factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

PM/PM10 - Landplaster Production Facilities

POINT SOURCE EMISSION	Emission Point / Stack Number	AIR FLOW SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
#1 & #2 Raymond Mills	11 / S-11	6000	0.015	99.0%	8760	0.77	3.38	80	2.6	208.00	911.04	AP-42	Chapter 11.16-2	49.06
#3 & #4 Raymond Mills	12 / S-12	5000	0.015	99.0%	8760	0.64	2.82	80	2.6	208.00	911.04	AP-42	Chapter 11.16-2	49.06
HRA L.P. Air Conveyor Receiver Dust Collector	36 / S-36	1500	0.015	99.0%	8760	0.19	8.45E-01	2	0.15	0.30	1.31	Fire 6.25	SCC3-05-015-04	6.52
Subtotal:						1.61	7.04				1823.39			

Note: Capacity for Potential to Emit for the Raymond Mill dust collectors is based on the sum of the capacities for all units routed to the dust collector.

Note: The HRA L.P. Air Conveyor has a potential to emit of less than 0.551 pounds per hour. Therefore, this unit is exempt from the requirements of 326 IAC 6-3.

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

POINT SOURCE EMISSION	Exhaust Point	Capacity TON/HR	Emission Factor LB/TON	Hours	Potential to Emit PM/PM10 LB/HR	Potential to Emit PM/PM10 TPY	Controlled PM/PM10 Emissions TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
Raymond Mill Feed Bin #1	partial enclosure	20	0.15	8760	3	13.14	Vents to S-11	30.51	Fire 6.25	SCC3-05-015-04	NF
Raymond Mill Feed Bin #2	partial enclosure	20	0.15	8760	3	13.14	Vents to S-12	30.51	Fire 6.25	SCC3-05-015-04	NF
Raymond Mill Feed Bin #3	partial enclosure	20	0.15	8760	3	13.14		30.51	Fire 6.25	SCC3-05-015-04	NF
Raymond Mill Feed Bin #4	partial enclosure	20	0.15	8760	3	13.14		30.51	Fire 6.25	SCC3-05-015-04	NF
Subtotal:					12.00	52.56					

Total: 59.60

Total Non-Fugitive from Glass Production: 7.04

Methodology

Controlled Potential to Emit (lb/hr) = Capacity (ton/hr) * Emission Factor (lb/ton) * (1- Control Efficiency %)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

PM/PM10 - Stucco Production Facilities

POINT SOURCE EMISSION	Exhaust Point	Capacity TON/HR	Emission Factor LB/TON	Hours	POTENTIAL TO EMIT PM/PM10 LB/HR	POTENTIAL TO EMIT PM/PM10 TPY	CONTROLLED POTENTIAL TO EMIT PM/PM 10 TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
Conveying System	partial enclosure	101.7	0.15	8760	15.26	66.82	66.82	51.45	Fire 6.25	SCC3-05-015-04	F
#2 Kettle Feed Bin	partial enclosure	12	0.15	8760	1.80	7.88	Vents to S-2	21.67	Fire 6.25	SCC3-05-015-04	NF

Subtotal: 15.26 74.70 66.82
 Subtotal Nonfugitive: 1.80 7.88 0.00

Methodology

Potential to Emit (lb/hr) = Capacity (ton/hr) * Emission Factor (lb/ton)
 Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

POINT SOURCE EMISSION	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Hours	Control Efficiency %	CONTROLLED POTENTIAL TO EMIT PM/PM 10 LB/HR	CONTROLLED POTENTIAL TO EMIT PM/PM 10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
#1 Kettle Dust Collector	1 / S-1	8000	0.015	8760	99%	1.03	4.51	105.6	41	4329.60	18963.65	Fire 6.25	SCC3-05-015-02	51.83
#2 Kettle Dust Collector	2 / S-2	6500	0.015	8760	99%	0.84	3.66	24	41	984.00	4309.92	Fire 6.25	SCC3-05-015-02	21.67
#3 Kettle Dust Collector	3 / S-3	6500	0.015	8760	99%	0.84	3.66	36	41	1476.00	6464.88	Fire 6.25	SCC3-05-015-02	45.24
#4 Kettle Dust Collector	4 / S-4	6500	0.015	8760	99%	0.84	3.66	45	41	1845.00	8081.10	Fire 6.25	SCC3-05-015-02	52.53
#5 Kettle Dust Collector	5 / S-5	14000	0.015	8760	99%	1.80	7.88	55	41	2255.00	9876.90	Fire 6.25	SCC3-05-015-02	60.09
#5 Conical Kettle LP Feed Bin Dust Collector	35 / S-35	1500	0.015	8760	99%	0.19	0.84	27.5	0.150	4.13	18.07	Fire 6.25	SCC3-05-015-04	37.77
Subtotal						5.53	24.22				47,715			

Above calculations represent process emissions only.

Total: 91.03
Total for Stucco Production Facilities 24.22

Note: Capacities for Potential to Emit for the Kettle and Hot Pit dust collectors are based on the sum of the capacities for all units routed to the dust collector.

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)
 Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)
 Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

PM/PM10 - Plaster Production Facilities

POINT SOURCE EMISSION	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
												Fire 6.25	SCC3-05-015-04	
Tube Mill	14 / S-14	4000	0.015	99%	8760	0.51	2.25	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
Mill Stucco Surge Bin Dust Collector	15 / S-15	2500	0.015	99%	8760	0.32	1.41	10	0.15	1.50	6.57	Fire 6.25	SCC3-05-015-04	19.18
#0 North Stucco Storage Bin	18 / S-18	412	0.012	99%	8760	0.04	0.19	20	0.15	3.00	13.14	Fire 6.25	SCC3-05-015-04	30.51
#0 South Stucco Storage Bin	19 / S-19	412	0.012	99%	8760	0.04	0.19	20	0.15	3.00	13.14	Fire 6.25	SCC3-05-015-04	30.51
#1 Stucco Storage Bin	20 / S-20	412	0.012	99%	8760	0.04	0.19	20	0.15	3.00	13.14	Fire 6.25	SCC3-05-015-04	30.51
B-Belt Dust Collector	17 / S-17	412	0.012	99%	8760	0.04	0.19	9	0.15	1.35	5.91	Fire 6.25	SCC3-05-015-04	17.87
Tail End of D-Belt Dust Collector	25 / S-25	412	0.012	99%	8760	0.04	0.19	9	0.15	1.35	5.91	Fire 6.25	SCC3-05-015-04	17.87
Perlite Dust Collector	29 / S-29	3000	0.015	99%	8760	0.39	1.69	1.6	0.15	0.24	1.05	Fire 6.25	SCC3-05-015-04	5.62
Plaster Packing Dust Collector - conveying system	30 / S-30	9000	0.015	99.00%	8760	Vents to S-30 (calculated in Glass Batch)	0.00	9	0.15	1.35	5.91	Fire 6.25	SCC3-05-015-04	17.87
Plaster Packing Dust Collector - plaster mixer	30 / S-30	9000	0.015	99.00%	8760	Vents to S-30 (calculated in Glass Batch)	0.00	27	0.15	4.05	17.74	Fire 6.25	SCC3-05-015-04	37.31
Plaster Packing Dust Collector - plaster packer	30 / S-30	9000	0.015	99.00%	8760	Vents to S-30 (calculated in Glass Batch)	0.00	27	0.15	4.05	17.74	Fire 6.25	SCC3-05-015-04	37.31
Bulk Sand Loading Bin	51 / S-55	1000	0.015	99%	8760	0.13	0.56	12	0.15	1.80	7.88	Fire 6.25	SCC3-05-015-04	21.67
Lime Bulk Loading Bin	52 / S-56	750	0.015	99%	8760	0.10	0.42	3.6	0.15	0.54	2.37	Fire 6.25	SCC3-05-015-04	9.67
North Packing Bin Dust Collector	57 / S-61	400	0.015	99%	8760	0.05	0.23	27	0.15	4.05	17.74	Fire 6.25	SCC3-05-015-04	37.31
South Packing Bin Dust Collector	58 / S-62	400	0.015	99%	8760	0.05	0.23	27	0.15	4.05	17.74	Fire 6.25	SCC3-05-015-04	37.31
Subtotal						1.76	7.71				152.56			

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

POINT SOURCE EMISSION	Emission Point / Stack Number	Capacity TON/HR	Emission Factor LB/TON	Control Efficiency %	Hours	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 tons/yr	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
**Perlite Ore Expander	43 / S-47	1.6	2.1	50.00%	8760	3.36	14.72	1.68	7.36	5.62	AP-42	Chapter 11-30.1	NF
(2) Perlite Ore Storage Bins	partial enclosure	1.6	0.15	0.00%	8760	0.24	1.05	0.24	1.05	5.62	Fire 6.25	SCC3-05-015-04	NF
Subtotal							15.77	1.92	8.41				

Total Non-Fugitive for Plaster Production Facilities: 168.32 16.12

* Above calculations represent process emissions only. Combustion calculations related to these units are located on pages 16-19.

** Perlite ore expander goes through a large drop out bin cyclone and then two cyclones before exhausting to the atmosphere.

Emission factor is based on AP-42 11-30.1 factor of 2.1 lb/ton for expander furnace with wet cyclone. A conservative 50% control efficiency was applied for the 2nd cyclone.

Methodology

Controlled Potential to Emit (lb/hr) = Capacity (ton/hr) * Emission Factor (lb/ton) * (1- Control Efficiency %)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Note: The (2) Perlite Ore Storage Bins, Perlite Dust Collector, and Lime Bulk Loading Bin each have a potential to emit of less than 0.551 pounds per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

PM/PM10 - Stucco Handling and Storage Facilities

POINT SOURCE EMISSION	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
Mill Stucco Surge Bin Dust Collector	15 / S-15	2500	0.015	99%	8760	Vents to S-15 (calculated in Plaster Production)	0.00	55	0.150	8.25	36.14	Fire 6.25	SCC3-05-015-04	45.47
A-Belt Dust Collector	16 / S-16	412	0.012	99%	8760	0.04	0.19	101.7	0.150	15.26	66.82	Fire 6.25	SCC3-05-015-04	51.45
#4 Stucco Storage Bin Dust Collector	22 / S-22	412	0.012	99%	8760	0.04	0.19	30	0.150	4.50	19.71	Fire 6.25	SCC3-05-015-04	39.96
#5 Stucco Storage Bin Dust Collector	23 / S-23	412	0.012	99%	8760	0.04	0.19	30	0.150	4.50	19.71	Fire 6.25	SCC3-05-015-04	39.96
Head of D-Belt Dust Collector	24 / S-24	412	0.012	99%	8760	0.04	0.19	101.7	0.150	15.26	66.82	Fire 6.25	SCC3-05-015-04	51.45
Tail End of F-Belt Dust Collector	28 / S-28	2500	0.015	99%	8760	0.32	1.41	101.7	0.150	15.26	66.82	Fire 6.25	SCC3-05-015-04	51.45
#3 Stucco Storage	31 / S-31	3000	0.015	99%	8760	Vents to S-31 (below)	0.00	30	0.150	4.50	19.71	Fire 6.25	SCC3-05-015-04	39.96
#2 Stucco Storage Bin Dust Collector	31 / S-31	3000	0.015	99%	8760	0.39	1.69	27.5	0.150	4.13	18.07	Fire 6.25	SCC3-05-015-04	37.77
Stucco Air Conveyor Receiving Dust Collector	46 / S-50	5000	0.015	99%	8760	0.64	2.82	101.7	0.150	15.26	66.82	Fire 6.25	SCC3-05-015-04	51.45
Stucco Air Conveyor Inlet Dust Collector	47 / S-51	750	0.015	99%	8760	0.10	0.42	101.7	0.150	15.26	66.82	Fire 6.25	SCC3-05-015-04	51.45
1000T Stucco Bin Dust Collector	53 / S-57	6000	0.02	99%	8760	1.03	4.51	27.5	0.150	4.13	18.07	Fire 6.25	SCC3-05-015-04	37.77
Total						2.64	11.58			106.28	465.48			

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

PM/PM10 - #1 Wallboard Production Facilities

Point Source Emission Unit	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
North and South Board Plant End Saw Dust Collectors	33 / S-33 or 34 / S-34	8000	0.015	99%	8760	1.03	4.51	112000 board feet per hour	0.005 lb/ft ²	560.00	2452.80	Fire 6.25	SCC3-05-015-22	157.60
Board Plant HRA Ball Mill Dust Collector	37 / S-37	1500	0.012	99%	8760	0.15	0.68	1.8	2.6	4.68	20.50	Fire 6.25	SCC3-05-015-02	6.08
Stucco Air Conveyor Receiving Dust Collector - conveying	46 / S-50	5000	0.015	99%	8760	Vents to S-50 (calculated in Stucco Handling)	0.00	40	0.150	6.00	26.28	Fire 6.25	SCC3-05-015-04	42.53
Stucco Air Conveyor Receiving Dust Collector - stucco storage bin	46 / S-50	5000	0.015	99%	8760	Vents to S-50 (calculated in Stucco Handling)	0.00	25	0.150	3.75	16.43	Fire 6.25	SCC3-05-015-04	35.43
Stucco Air Conveyor Receiving Dust Collector - dry additive feeders	46 / S-50	5000	0.015	99%	8760	Vents to S-50 (calculated in Stucco Handling)	0.00	4.5	0.150	0.68	2.96	Fire 6.25	SCC3-05-015-04	11.23
Stucco Air Conveyor Receiving Dust Collector - mixer	46 / S-50	5000	0.015	99%	8760	Vents to S-50 (calculated in Stucco Handling)	0.00	46.5	0.150	6.98	30.55	Fire 6.25	SCC3-05-015-04	43.90
GLIP Saws Dust Collector	55 / S-59	10500	0.015	99%	8760	1.35	5.91	28800 board feet per hour	0.005 lb/ft ²	144.00	630.72	Fire 6.25	SCC3-05-015-22	130.18
#1 Board Line PST Belt Dust Collector	56 / S-60	500	0.015	99%	8760	0.06	0.28	20	0.150	3.00	13.14	Fire 6.25	SCC3-05-015-04	30.51
Subtotal						2.60	11.38				3193.37			

Note: Capacity for Potential to Emit for the North and South Board Plant End Saw and GLIP Dust Collectors is based on the sum of the capacities for all units routed to the dust collector.

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

PM/PM10 - #2 Wallboard Production Facilities

Point Source Emission Unit	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
Stucco Air Conveyor Receiving Dust Collector - conveying	46 / S-50	5000	0.015	99%	8760	Vents to S-50 (calculated in Stucco Handling)	0.00	60	0.15	9.00	39.42	Fire 6.25	SCC3-05-015-04	46.29
#2 Board Line Stucco Bin Dust Collector - stucco storage silo	32 / S-32	3000	0.015	99%	8760	0.39	1.69	60	0.15	9.00	39.42	Fire 6.25	SCC3-05-015-04	46.29
#2 Board Line Stucco Bin Dust Collector - dry additive feeders	32 / S-32	3000	0.015	99%	8760	Vents to S-32 (calculated in #2 Wallboard)	0.00	4.5	0.15	0.68	2.96	Fire 6.25	SCC3-05-015-04	11.23
#2 Board Line Stucco Bin Dust Collector - slurry mixer	32 / S-32	3000	0.015	99%	8760	Vents to S-32 (calculated in #2 Wallboard)	0.00	64.5	0.15	9.68	42.38	Fire 6.25	SCC3-05-015-04	49.16
#2 Board Line HRA Receiving Bin Dust Collector	59 / S-63	500	0.015	99%	8760	0.06	0.28	1.5	0.15	0.23	0.99	Fire 6.25	SCC3-05-015-04	5.38
#2 Board Line PST Dust Collector	27 / S-27	500	0.015	99%	8760	0.06	0.28	20	0.15	3.00	13.14	Fire 6.25	SCC3-05-015-04	30.51
Subtotal						0.51	2.25				98.88			

Note: The slurry mixer has a capacity of 80.81 ton per hour including water. This capacity is used for the 326 IAC 6-3 limit calculation.

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Note: The HRA Airveyor and Receiving Bin has a potential to emit of less than 0.551 pounds per hour. Therefore, this unit is exempt from the requirements of 326 IAC 6-3.

PM/PM10 - Dunnage Machine Facilities

Point Source Emission Unit	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Capacity Ft ² /hr	Emission Factor LB/FT ²	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR	Fugitive (F) or Non-Fugitive (NF)
Dunnage Machine	50 / S-54	8000	0.01	99%	8760	0.69	3.00	55	2400	0.008	19.20	240.90	Fire 6.25	SCC3-05-015-21	45.47	NF
Total						0.69	3.00				19.20	240.90				

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

PM/PM10 - Wallboard Waste Reclamation Facilities

Point Source Emission Unit	Emission Point / Stack Number	Air Flow SCFM	Grain Loading GR/DSCF	Control Efficiency %	Hours	Controlled PM/PM10 LB/HR	Controlled PM/PM10 TPY	Capacity TON/HR	Emission Factor LB/TON	Potential to Emit PM/PM10 lb/hr	Potential to Emit PM/PM10 TPY	Source of Emission Factor		326 IAC 6-3 LIMIT LB/HR
Williams Mill for Synthetic Gypsum & Waste Reclaim Dust Collector - vibrating screen system	49 / S-53	40000	0.02	99%	8760	6.86	30.03	50	0.15	7.50	32.85	Fire 6.25	SCC3-05-015-04	44.58
Williams Mill for Synthetic Gypsum & Waste Reclaim Dust Collector - Williams Mill	49 / S-53	40000	0.02	99%	8760	Vents to S-53 (calculated above)	0.00	50	0.15	7.50	32.85	Fire 6.25	SCC3-05-015-04	44.58
Subtotal						6.86	30.03			15.00	65.70			

Methodology

Controlled Potential to Emit (lb/hr) = Air Flow (SCFM) * Grain Loading (GR/DSCF) * 60 (min/hr) / 7000 (gr/lb)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) / 2000 (lb/ton)

Point Source Emission Unit	Exhaust Point / Control Method	Capacity TON/HR	Emission Factor LB PM/TON PROCESSED	Control Efficiency %	Hours	Potential to Emit PM/PM10 LB/HR	Potential to Emit PM/PM10 TPY	Controlled PM/PM10 TPY	326 IAC 6-3 LIMIT LB/HR	Source of Emission Factor		Fugitive (F) or Non-Fugitive (NF)
waste wallboard shredder	partial enclosure	20	0.15	0%	8760	3	13.14	13.14	30.51	Fire 6.25	SCC3-05-015-04	NF
synthetic gypsum / waste reclaim belt	partial enclosure	50	0.003	0%	8760	0.15	0.66	0.66	44.58	AP-42	Chapter 11.19.2-2	F
synthetic gypsum storage bin	partial enclosure / moisture suppression	50	0.003	10%	8760	0.15	0.66	0.59	44.58	AP-42	Chapter 11.19.2-2	NF
Subtotal						3.3	14.5	14.4				

Total Non-Fugitive 0.15 0.66 13.73

Total Non-Fugitive for #1 Wallboard Production Facilities 18.30 66.36 43.77

Note: The AP-42 emission factors for Crushed Stone Processing and Pulverized Mineral Processing was used for Waste reclamation operations occurring before the material is dried in the Williams Mill. These emission factors account for a conservative 1% moisture in the material. Synthetic gypsum is estimated by the source to contain 7 - 8% moisture.

Methodology

Controlled Potential to Emit (lb/hr) = Capacity (ton/hr) * Emission Factor (lb/ton) * (1 - Control Efficiency %)

Controlled Potential to Emit (TPY) = Controlled Potential to Emit (lb/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Potential to Emit (TPY) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 (hr/yr) * 1 ton / 2000 lb

Note: Yellow highlight indicates that this number was used to calculate the total plant-wide limited emissions.

Synthetic Gypsum Movement to Synthetic Gypsum Shed and Waste Surge Pile Calculations

Emission Factor (EF) Equation¹

$$EF \text{ (lb/ton)} = k * 0.0032 * (U / 5)^{1.3} / (M/2)^{1.4}$$

$k =$ Particle size multiplier = 0.74 for PM
 0.35 for PM-10
 $U =$ mean wind speed, mph = 9
 $M =$ material moisture content, % = 10

Material Transfer Emission Factor = 5.34E-04 lb PM/ton Sludge
 2.53E-04 lb PM-10/ton Sludge

PM/PM-10 Emissions Calculation

Annual emissions based on maximum transfer rates.

Synthetic Gypsum brought by IPL truckload 438,000 tons/yr

Transfer Description	Max Rate ton/hr	Max Gypsum Transferred ton/yr	Potential to Emit PM Emissions ton/yr	Potential to Emit PM-10 Emissions ton/yr
Addition to Synthetic/Gypsum Pile inside Syn Gyp Shed	50	438,000	0.117	0.055
Waste Surge Pile	5	43,800	0.012	0.006
Uncontrolled Potential Emissions			0.12	0.06

Notes:

1. AP-42, Chapter 13.2.4, January 1995.
2. Wet materials; 10% moisture

Note: The potential to emit from the addition to the synthetic gypsum pile inside the synthetic gypsum storage shed and the waste surge pile is less than 0.551 pounds per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Rotary rock dryer, #1 MBR Kettle Burners, Burner #2, Burner #3, Burner
#4, Burner #5, Perlite Expander, Kiln #1, Kiln #2, Williams Mill
Company Name: U.S. Gypsum Company

Heat Input Capacity	
MMBtu/hr	
kiln1	55
kiln 2	80
kettle 1	15
kettle 2	12
kettle 3	12
kettle 4	15
kettle 5	20
rock dryer	14
perlite expander	2.3
Williams mill	30
Total	255.3

Heat Input Capacity	Potential Throughput
MMBtu/hr	MMCF/yr
255.3	2236.4

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	2.1	8.5	6.71E-01	111.8	6.2	93.9

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

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 See page 17 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 Rotary rock dryer, #1 MBR Kettle Burners, Burner #2, Burner #3, Burner
 #4, Burner #5, Perlite Expander, Kiln #1, Kiln #2, Williams Mill
 HAPs Emissions**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.348E-03	1.342E-03	8.387E-02	2.013E+00	3.802E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.591E-04	1.230E-03	1.565E-03	4.249E-04	2.348E-03

Methodology is the same as page 1.

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

Appendix A: Emissions Calculations
Rotary rock dryer, #1 MBR Kettle Burners, Burner #2, Burner #3, Burner #4, Burner #5,
Perlite Expander, Kiln #1, Kiln #2, Williams Mill
#1 and #2 Fuel Oil

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.5	Potential Throughput kgals/year
255.3	15,974.49		3,000

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.0	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	16.0	567.1	159.7	2.7	39.9
Limited Emissions in tons/yr	3.0	106.5	30.0	0.5	7.5

Methodology

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

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

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

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

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

See page 19 for HAPs emission calculations.

**Rotary rock dryer, #1 MBR Kettle Burners, Burner #2, Burner #3, Burner #4, Burner #5,
 Perlite Expander, Kiln #1, Kiln #2, Williams Mill
 #1 and #2 Fuel Oil
 HAPs Emissions**

	HAPs - Metals				
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	4.47E-03	3.35E-03	3.35E-03	3.35E-03	1.01E-02

	HAPs - Metals (continued)			
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	3.35E-03	6.71E-03	3.35E-03	1.68E-02

Methodology

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

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

**Appendix A: Emissions Calculations
 Process Emissions Only
 Drying Kiln #1 and #2 Process Emissions**

Heat Input Capacity
 MMBtu/hr

Mold/Water Resistant Additive Usage
 lbs/yr

55.0
80.0

Kiln #1
 Kiln #2

2,000,000

	Pollutant						
	PM*	PM10*	SO2	NOx	VOC	CO	Formaldehyde
Process Emission Factor in lb/MMBtu	0.022	0.022			0.034		0.004
Emission Factor Based on Mold/Water Resistant Additive Usage (lb/lb of additive)	0.017	0.017			0.024		0.0023
Process Emissions (tons/yr)	13.0	13.0	0.0	0.0	20.1	0.0	2.4
Emissions from Mold/Water Resistant Additive Usage (tons/yr)	17	17	0	0	24	0	2.3
Total Emissions (tons/yr)	30.0	30.0	0.0	0.0	44.1	0.0	4.7

Note: These emissions only account for process emissions. Combustion emissions from kilns are calculated on the worksheet titled "Combustion".

Mold/Water Resistant Additive emission factor is based on the worst case additive siloxane.

Siloxane and Process emission factors are based on highest value of a stack tests performed at similar facilities + 20% safety factor

Methodology

Process Emissions (ton/yr) = Process Emission Factor (lb/MMBtu) * Heat Input Capacity (MMBtu/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Emissions from Mold/Water Resistant Additive Usage (ton/yr) = Emission Factor based on Mold/Water Resistant Additive Usage (lb/lb of additive) * Mold/Water Resistant Additive Usage (lbs/yr) / 2000 (lb/ton)