



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
*Governor*

Carol S. Comer  
*Commissioner*

## NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a  
Significant Modification to a  
Part 70 Operating Permit

for United States Gypsum Company in Lake County

Significant Permit Modification No.: 089-36567-00333

The Indiana Department of Environmental Management (IDEM) has received an application from United States Gypsum Company, located at 301 Riley Rd., East Chicago, Indiana 46312, for a significant modification of its Part 70 Operating Permit issued on November 19, 2014. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow United States Gypsum Company to make certain changes at its existing source. United States Gypsum Company has applied to update the control devices to reflect current control device configurations. The modification will result in the removal of JBH-5 and JBH-15, the idling of MBH-1, and the addition of JBH-21, MBH-25, and MBH-27. Additionally, the source is requesting the removal of the 36.4% PM<sub>2.5</sub> to PM<sub>10</sub> allocation currently utilized in the calcining kettle PM<sub>2.5</sub> allowable emissions calculations. This will increase the limited emissions of PM<sub>2.5</sub> to the same rates as PM<sub>10</sub> for the three (3) Calcining kettles identified as #1A, #1B, and #2.

This draft Significant Permit Modification does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

East Chicago Public Library  
2401 East Columbus Drive  
East Chicago, IN 46312

and

IDEM Northwest Regional Office  
330 W. US Highway 30, Suites E & F  
Valparaiso, IN 46385

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

### How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing,

IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number 089-36567-00333 in all correspondence.

**Comments should be sent to:**

Joshua Levering  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for extension 4-6543  
Or dial directly: (317) 234-6543  
Fax: (317) 232-6749 attn: Joshua Levering  
E-mail: [JLeverin@idem.IN.gov](mailto:JLeverin@idem.IN.gov)

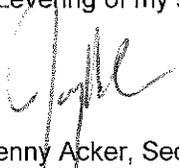
All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Joshua Levering or my staff at the above address.



Jenny Acker, Section Chief  
Permits Branch  
Office of Air Quality



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## DRAFT

Mr. Phillip Weer  
United States Gypsum Company  
301 Riley Road  
East Chicago, IN 46312

Re: 089-36567-00333  
Significant Permit Modification to  
Part 70 Renewal No.: T089-33640-00333

Dear Mr. Phillip Weer:

United States Gypsum Company was issued Part 70 Operating Permit Renewal No. T089-33640-00333 on November 19, 2014 for a stationary gypsum wallboard and gypsum products manufacturing plant located at 301 Riley Road, East Chicago, Indiana 46312. An application requesting changes to this permit was received on December 7, 2015. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A: Fugitive Particulate Matter Control Plan  
Attachment B: 40 CFR 60, Subpart OOO, NSPS for Nonmetallic Mineral Processing Plants  
Attachment C: 40 CFR 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries

Previously issued approvals for this source containing these attachments are available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl).

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

## DRAFT

If you have any questions on this matter, please contact Joshua Levering, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-234-6543 or 1-800-451-6027, and ask for extension 4-6543.

Sincerely,

Jenny Acker, Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Modified Permit and Technical Support Document

cc: File - Lake County  
Lake County Health Department  
U.S. EPA, Region 5  
Compliance and Enforcement Branch  
IDEM Northwest Regional Office



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence  
Governor

Carol S. Comer  
Commissioner

DRAFT

## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**United States Gypsum Company  
301 Riley Road  
East Chicago, Indiana 46312**

(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.: T089-33640-00333	
Issued by/Original Signed: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 19, 2014  Expiration Date: November 19, 2019
Significant Permit Modification No.: 089-36567-00333	
Issued by:  Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date:  Expiration Date: November 19, 2019



DRAFT

## TABLE OF CONTENTS

<b>SECTION A</b>	<b>SOURCE SUMMARY .....</b>	<b>6</b>
A.1	General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][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(14)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
<b>SECTION B</b>	<b>GENERAL CONDITIONS .....</b>	<b>14</b>
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(12)][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	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.16	Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]	
B.19	Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]	
B.20	Source Modification Requirement [326 IAC 2-7-10.5]	
B.21	Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]	
<b>SECTION C</b>	<b>SOURCE OPERATION CONDITIONS.....</b>	<b>25</b>
	<b>Emission Limitations and Standards [326 IAC 2-7-5(1)] .....</b>	<b>25</b>
C.1	Opacity [326 IAC 5-1]	
C.2	Open Burning [326 IAC 4-1][IC 13-17-9]	
C.3	Incineration [326 IAC 4-2][326 IAC 9-1-2]	
C.4	Fugitive Dust Emissions [326 IAC 6-4]	
C.5	Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3]	
C.6	Stack Height [326 IAC 1-7]	
C.7	Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
	<b>Testing Requirements [326 IAC 2-7-6(1)].....</b>	<b>28</b>
C.8	Performance Testing [326 IAC 3-6]	
	<b>Compliance Requirements [326 IAC 2-1.1-11] .....</b>	<b>28</b>
C.9	Compliance Requirements [326 IAC 2-1.1-11]	

DRAFT

<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>28</b>
C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]	
C.11 Continuous Compliance Plan [326 IAC 6.8-8-1][326 IAC 6.8-8-8]	
C.12 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]	
<b>Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]</b> .....	<b>30</b>
C.13 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]	
C.14 Risk Management Plan [326 IAC 2-7-5(11)][40 CFR 68]	
C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]	
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]</b> .....	<b>33</b>
C.17 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.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]	
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][40 CFR 64][326 IAC 3-8]	
<b>Stratospheric Ozone Protection</b> .....	<b>35</b>
C.20 Compliance with 40 CFR 82 and 326 IAC 22-1	
<b>SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>36</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>36</b>
D.1.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]	
D.1.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]	
D.1.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]	
D.1.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]	
D.1.5 Particulate Emission Limitations [326 IAC 6.8-1-2]	
D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]	
<b>Compliance Determination Requirements [326 IAC 2-7-5(1)]</b> .....	<b>38</b>
D.1.7 Particulate Control	
<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>38</b>
D.1.8 Visible Emissions Notations	
D.1.9 Broken or Failed Bag Detection	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>39</b>
D.1.10 Record Keeping Requirements	
<b>SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>40</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>41</b>
D.2.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]	
D.2.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]	
D.2.3 Particulate Emission Limitations [326 IAC 6.8-1-2]	
D.2.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]	
D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]	
<b>Compliance Determination Requirements [326 IAC 2-7-5(1)]</b> .....	<b>42</b>
D.2.6 Particulate Control	
D.2.7 Testing Requirements [326 IAC 2-1.1-11]	

DRAFT

<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>43</b>
D.2.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]	
D.2.9 Visible Emissions Notations	
D.2.10 Broken or Failed Bag Detection	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>44</b>
D.2.11 Record Keeping Requirements	
<b>SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>46</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>47</b>
D.3.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]	
D.3.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]	
D.3.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]	
D.3.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]	
D.3.5 Particulate Emission Limitations [326 IAC 6.8-1-2]	
D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]	
<b>Compliance Determination Requirements [326 IAC 2-7-5(1)]</b> .....	<b>49</b>
D.3.7 Particulate Control	
D.3.8 Testing Requirements [326 IAC 2-1.1-11]	
<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>50</b>
D.3.9 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]	
D.3.10 Visible Emissions Notations	
D.3.11 Broken or Failed Bag Detection	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>51</b>
D.3.12 Record Keeping Requirements	
<b>SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>53</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>55</b>
D.4.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]	
D.4.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]	
D.4.3 Particulate Emission Limitations [326 IAC 6.8-1-2]	
D.4.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]	
D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]	
<b>Compliance Determination Requirements [326 IAC 2-7-5(1)]</b> .....	<b>57</b>
D.4.6 Particulate Control	
D.4.7 Testing Requirements [326 IAC 2-1.1-11]	
<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>58</b>
D.4.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]	
D.4.9 Visible Emissions Notations	
D.4.10 Broken or Failed Bag Detection	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>59</b>
D.4.11 Record Keeping Requirements	
<b>SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>61</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>62</b>
D.5.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]	
D.5.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]	

DRAFT

D.5.3	PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37	
D.5.4	Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]	
D.5.5	Particulate Emission Limitations [326 IAC 6.8-1-2]	
D.5.6	Preventive Maintenance Plan [326 IAC 2-7-5(12)]	
	<b>Compliance Determination Requirements [326 IAC 2-7-5(1)]</b> .....	<b>65</b>
D.5.7	Particulate Control	
D.5.8	Testing Requirements [326 IAC 2-1.1-11]	
	<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]</b> .....	<b>65</b>
D.5.9	Compliance Assurance Monitoring (CAM) [40 CFR Part 64]	
D.5.10	Visible Emissions Notations	
D.5.11	Broken or Failed Bag Detection	
	<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>67</b>
D.5.12	Record Keeping Requirement	
<b>SECTION D.6</b>	<b>EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>69</b>
	<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> .....	<b>70</b>
D.6.1	Nonattainment Area Particulate Limitation [326 IAC 6.8-1-2]	
D.6.2	Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]	
D.6.3	Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]	
	<b>Compliance Determination Requirement [326 IAC 2-7-5(1)]</b> .....	<b>71</b>
D.6.4	Testing Requirements [326 IAC 2-1.1-11]	
	<b>Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b> .....	<b>71</b>
D.6.5	Record Keeping Requirements [326 IAC 8-3-8]	
<b>SECTION E.1</b>	<b>NSPS</b> .....	<b>73</b>
	<b>New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]</b> .....	<b>73</b>
E.1.1	General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]	
E.1.2	Standards of Performance for Calciners and Dryers in Mineral Industries NSPS [326 IAC 12][40 CFR Part 60, Subpart UUU]	
<b>SECTION E.2</b>	<b>NSPS</b> .....	<b>75</b>
	<b>New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]</b> .....	<b>76</b>
E.2.1	General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]	
E.2.2	Standards of Performance for Nonmetallic Mineral Processing Plants NSPS [326 IAC 12][40 CFR Part 60, Subpart OOO]	
<b>CERTIFICATION</b> .....		<b>77</b>
<b>EMERGENCY OCCURRENCE REPORT</b> .....		<b>78</b>
<b>QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT</b> .....		<b>80</b>
<b>Attachment A</b>	<b>- Fugitive Particulate Matter Control Plan</b>	
<b>Attachment B</b>	<b>- New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants [40 CFR Part 60, Subpart OOO]</b>	
<b>Attachment C</b>	<b>- New Source Performance Standards (NSPS) for Calciners and Dryers in Mineral Industries [40 CFR Part 60, Subpart UUU]</b>	

DRAFT

## 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(14)][326 IAC 2-7-1(22)]

---

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

Source Address:	301 Riley Road, East Chicago, Indiana 46312
General Source Phone Number:	(219) 392-4664
SIC Code:	3275
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other 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 Greenhouse Gas (GHG) potential to emit (PTE) is equal to or more than one hundred thousand (100,000) tons of CO2 equivalent (CO2e)emissions per year 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(14)]

---

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

Raw material handling and storage, consisting of the following equipment:

- (a) One (1) pneumatic rail car unloading facility, constructed in 1977, with a maximum throughput of 24,000 pounds per hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively.
- (b) One (1) pneumatic truck unloading facility, constructed in 1977, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, constructed in 1977, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, constructed in 1977, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- (e) One (1) mica storage silo, constructed in 1977, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.

DRAFT

- (f) One (1) perlite storage silo, constructed in 1977, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (g) One (1) enclosed rock shed, constructed in 1929, with a maximum capacity of 125,000 tons.
- (h) One (1) waste board material stockpile, permitted in 1988, identified as F-1, with particulate matter emissions exhausting directly to the atmosphere.
- (i) One (1) synthetic gypsum storage pile, constructed in 2009 and approved in 2014 for modification, with a storage capacity of 100,000 tons.

A landplaster production process, consisting of the following equipment:

- (a) One (1) dryer mill bin #1, constructed in 1988, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, exhausting and exhausting through one (1) stack, identified as M-8.
- (b) One (1) dryer mill bin #2, constructed in 1999, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, exhausting and exhausting through one (1) stack, identified as M-12.
- (c) One (1) dryer mill #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (d) One (1) natural gas-fired burner for the dryer mill #1, constructed in 1988, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) screening station #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) dryer mill #2, constructed in 1988, with a maximum throughput of 35 tons per hour, and one (1) screening station #2 (hammer mill #2), with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (g) One (1) natural gas-fired burner for the dryer mill #2, constructed in 1988, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-12.
- (h) One (1) mill HRA landplaster bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one (1) stack, identified as M-19.
- (i) One (1) paper waste reclamation unit, constructed in 2007, with a maximum capacity of 5.0 tons per hour, with particulate emissions controlled by one (1) cyclone and one (1) baghouse dust collector, identified as DC WR-3, exhausting through one (1) stack, identified as WR-3.

DRAFT

A stucco production process, consisting of the following equipment:

- (a) Two (2) kettle feed bins, known as kettle feed bin #1 and kettle feed bin #2, constructed in 1929, each with a maximum capacity of 60 tons, with particulate matter emissions controlled by three (3) baghouses. Emissions from kettle feed bin #1 will be controlled by two (2) baghouses, known as MBH-25 and MBH-28, and exhausting through two (2) stacks, identified as M-25 and M-28. Emissions from kettle feed bin #2 will be controlled by one (1) baghouse, known as MBH-27 and exhausting through one (1) stack, identified as M-27.
- (b) One (1) calcining kettle, known as calcining kettle #1A, constructed in 2006, with a maximum throughput of 11.5 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-22, and exhausting through one (1) stack, identified as M-22.
- (c) One (1) calcining kettle, known as calcining kettle #1B, constructed in 2007, with a maximum throughput of 12.0 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-26, and exhausting through one (1) stack, identified as M-26.
- (d) One (1) calcining kettle, known as calcining kettle #2, constructed in 1998, with a maximum throughput of 45 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-16, and exhausting through one (1) stack, identified as M-16.
- (e) One (1) natural gas-fired burner for calcining kettle #1A, constructed in 2007, with a heat input capacity of 7.5 MMBtu per hour, and exhausting through one (1) stack, identified as M-22.
- (f) One (1) natural gas-fired burner for calcining kettle #1B, constructed in 2006, with a heat input capacity of 7.5 million British thermal units per hour, and exhausting through one (1) stack, identified as M-26.
- (g) Six (6) natural gas-fired burners for the calcining kettle #2, constructed in 1998, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as M-14.
- (h) [RESERVED]
- (i) [RESERVED]
- (j) Miscellaneous stucco handling equipment, constructed in 1998, including one (1) #4 stucco elevator, one (1) #17 screw, and one (1) #17A screw, with a maximum throughput of 70 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the stucco handling system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (k) Stucco storage equipment, including one (1) #49 screw, and one (1) #47 screw, constructed in 1929, with a maximum capacity of seventy (70) tons per hour, and three stucco storage bins, known as #1, #2 and #3, each with a capacity of 175 tons, with particulate emissions controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (l) Stucco storage equipment, including one (1) #1 elevator and one (1) #27 screw, constructed in 1929, with a maximum capacity of seventy (70) tons per hour, and three

DRAFT

- (3) stucco storage bins, known as #4, #5 and #6, each with a capacity of 175 tons, with particulate emissions controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (m) One (1) stucco storage bin, constructed in 1999, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (n) A conveying system, constructed in 1988, consisting of belt and screw conveyors, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, constructed in 1999, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, constructed in 1999, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) (HRA) landplaster feed bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting inside the building through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), constructed in 1999, with a maximum capacity of 10 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (e) One (1) HRA ball mill, constructed in 1999, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting inside the building through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) One (1) additive refill bin (starch) constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16A, and exhausting through one (1) stack, identified as B-16A and one (1) additive refill bin (sugar), constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting through stack B-16.
- (h) One (1) additive refill receiver (kaolinite), controlled by one (1) baghouse, identified as BBH-17, constructed in 1999, and exhausting inside the building through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and kaolinite), constructed in 1999, each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (kaolinite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.

DRAFT

- (j) One (1) additive surge bin (kaolinite), constructed in 1999, with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, constructed in 1999, with a maximum capacity of six (6) cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (l) One (1) paper fiber mill with cyclone separator, constructed in 1999, with a maximum throughput of 900 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (m) One (1) mixing screw conveyor, constructed in 1999, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (n) One (1) natural gas-fired gauging water heater, constructed in 1999, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
- (o) One (1) wet mixer, constructed in 1999, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (p) One (1) wet zone kiln natural gas-fired burner, constructed in 1999, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (q) One (1) dry zone kiln natural gas-fired burner, constructed in 1999, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (r) One (1) wet end seal natural gas-fired burner, constructed in 1999, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (s) One (1) dry end seal natural gas-fired burner, constructed in 1999, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (t) One (1) wallboard drying kiln, constructed in 1999, with a maximum throughput of 90,000 square feet (1/2 inch equivalent) of wallboard per hour, and exhausting through one (1) main stack, identified as B-20.
- (u) One (1) end saw, constructed in 1999, with a maximum throughput of 90,000 square feet (1/2 inch equivalent) of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.
- (v) One (1) wallboard shredder, constructed in 1999, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses, identified as WRBH-1 and WRBH-2, and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively.
- (w) One (1) existing dunnage saw, constructed in 1999, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

A joint treatment process, consisting of the following equipment:

DRAFT

- (a) A pneumatic conveying system from the bulk storage silos to the scale hoppers, constructed in 1977, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, constructed in 1977, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, constructed in 1977, each with a maximum throughput of 5 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additive bag dump, constructed in 1977, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as JVH-3, and exhausting through one (1) stack, identified as J-3.
  - (3) Two (2) wet mixers, constructed in 1997, each with a maximum throughput of 7.25 tons per hour, controlled by baghouses JBH-1 and JBH-2, each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (4) One (1) Quick mixer, controlled by one (1) baghouse, identified as JVH-20.
  - (5) One (1) conveying system, controlled by one (1) baghouse, identified as JVH-3.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry joint additive dump and conveying system, constructed in 1995, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) vacuum receiver dust collector, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - (2) One (1) dry joint dust collector discharge return screw conveyor, constructed in 1995, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (3) One (1) dry joint mixer, constructed in 1977, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, constructed in 1977, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building through stack J-14.
- (e) A dry texture paint line, consisting of the following equipment:
  - (1) One (1) dry texture paint dust collector discharge return screw conveyor, constructed in 1995, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.

DRAFT

- (2) One (1) dry texture paint mixer, constructed in 1977, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
  - (3) One (1) packing machine, constructed in 1977, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
  - (4) One (1) dry paint weigh station, constructed in 1977, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.
  - (5) One (1) dry additive conveying system, constructed in 1977, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.
  - (6) One (1) additive bag dump, constructed in 1977, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.
- (f) A bag dump system serving the ready-mix, dry joint compound, and dry texture paint lines, consisting of the following equipment:
- (1) One (1) bag and tote dispensing system, identified as BT1, constructed in 2006, with a maximum throughput of 2,166 pounds of dry additives per hour, controlled by one dry cartridge filter dust collector, identified as JBH-17, exhausting inside the building.
  - (2) One (1) weighing and batching system identified as WB1, constructed in 2006, with a maximum throughput of 2,166 pounds of dry additives per hour, controlled by two (2) dry cartridge filter dust collectors, identified as JBH-18 and JBH-19, exhausting inside the building.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

---

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

- (a) A total of three (3) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) One (1) walboard paper baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
  - (1) One (1) natural gas-fired paper heater, constructed in 1999, with a heat input

DRAFT

- capacity of 2.2 MMBtu per hour. [326 IAC 6.8-1-2(a)]
- (2) One (1) Bryan boiler producing hot water in the Board Plant Wet Room, constructed in 1999, with a heat input capacity of 5.00 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (3) Four (4) make up air units in the Board Plant, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr, each. [326 IAC 6.8-1-2(a)]
  - (4) One (1) make up air unit in the Joint Treatment Loading Department, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (5) One (1) process water heater in the Joint Treatment Department, constructed in 2005, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (6) One (1) process water heater in the Joint Treatment Department, constructed in 2011, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
- (e) A polypropylene bag grinding process, consisting of the following equipment:
- (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3) Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (f) Wallboard printing and adhesive application to paper edge and end tape, constructed in 1999, with combined potential to emit VOC of less than fifteen (15) pounds per day.
- (g) Various water based adhesives (edge paste and end tape) used for the application of tape to the wallboard with VOC emissions uncontrolled and exhausting directly to the atmosphere.
- (h) Various inkjet printers (Absolute. Ink-jet Kiwi and Digraph) used in the wallboard marking process with VOC emissions uncontrolled and exhausting directly to the atmosphere.
- (i) Two 20,000 gallons tanks for storage of latex emulsion.

#### 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).

DRAFT

## 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, T089-33640-00333, 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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

DRAFT

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
  - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
  - (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

**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 April 15 of each year to:

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

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.

DRAFT

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

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

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

DRAFT

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

B.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 or Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865  
Northwest Regional Office phone: (219) 464-0233; fax: (219) 464-0553.

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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.

DRAFT

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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)(8) 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.

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

DRAFT

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 T089-33640-00333 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** 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

DRAFT

- (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.16 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

DRAFT

B.17 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  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.18 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 or notice 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.19 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) or (c) 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  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

DRAFT

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)(1) and (c)(1). 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) and (c)(1).

- (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(37)) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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.20 Source Modification Requirement [326 IAC 2-7-10.5]**

---

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

DRAFT

B.21 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.22 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  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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.23 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.

DRAFT

- (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.24 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.

DRAFT

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

- (a) Opacity shall not exceed an average of twenty percent (20%) 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.2 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.3 Incineration [326 IAC 4-2][326 IAC 9-1-2]

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

#### C.4 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.5 Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

DRAFT

- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) Material processing facilities shall include the following:
  - (1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
  - (2) The PM<sub>10</sub> emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
  - (3) The PM<sub>10</sub> stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
  - (4) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.
  - (5) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).
- (i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (j) Material transfer limits shall be as follows:
  - (1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
  - (2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.
  - (3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
    - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.
    - (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan.

DRAFT

C.6 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.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

---

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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

DRAFT

(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.8 Performance Testing [326 IAC 3-6]

---

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (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.9 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.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

---

- (a) For new units:  
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

DRAFT

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 Continuous Compliance Plan [326 IAC 6.8-8-1][326 IAC 6.8-8-8]

- (a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.
- (b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

DRAFT

**C.12 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. The analog instrument shall be capable of measuring values outside of the normal range.
- (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.13 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]**

---

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

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

**C.14 Risk Management Plan [326 IAC 2-7-5(11)][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.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]**

---

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

DRAFT

- (2) review of operation and maintenance procedures and records; and/or
    - (3) inspection of the control device, associated capture system, and the process.
  - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
  - (e) The Permittee shall record the reasonable response steps taken.
- (II)
  - (a) *CAM Response to excursions or exceedances.*
    - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
    - (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
  - (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
  - (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
  - (d) Elements of a QIP:  
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

DRAFT

- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
  - (1) Failed to address the cause of the control device performance problems; or
  - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) *CAM recordkeeping requirements.*
  - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
  - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

C.16 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 submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

DRAFT

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

### C.17 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) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:
- (1) starting in 2004 and every three (3) years thereafter, and
  - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) 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(33) ("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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

### C.18 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. Support information includes the following, where applicable:
- (AA) All calibration and maintenance records.
  - (BB) All original strip chart recordings for continuous monitoring instrumentation.
  - (CC) Copies of all reports required by the Part 70 permit.
- Records of required monitoring information include the following, where applicable:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
  - (BB) The dates analyses were performed.
  - (CC) The company or entity that performed the analyses.
  - (DD) The analytical techniques or methods used.
  - (EE) The results of such analyses.
  - (FF) The operating conditions as existing at the time of sampling or measurement.

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

DRAFT

makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11]  
[40 CFR 64][326 IAC 3-8]

---

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

- (b) The address for report submittal is:

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

DRAFT

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

### **Stratospheric Ozone Protection**

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

---

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

DRAFT

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

Raw material handling and storage, consisting of the following equipment:

- (a) One (1) pneumatic rail car unloading facility, constructed in 1977, with a maximum throughput of 24,000 pounds per hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively.
- (b) One (1) pneumatic truck unloading facility, constructed in 1977, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, constructed in 1977, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, constructed in 1977, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- (e) One (1) mica storage silo, constructed in 1977, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.
- (f) One (1) perlite storage silo, constructed in 1977, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (g) One (1) enclosed rock shed, constructed in 1929, with a maximum capacity of 125,000 tons.
- (h) One (1) waste board material stockpile, permitted in 1988, identified as F-1, with particulate matter emissions exhausting directly to the atmosphere.
- (i) One (1) synthetic gypsum storage pile, constructed in 2009 and approved in 2014 for modification, with a storage capacity of 100,000 tons.

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

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

**D.1.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Limits (lbs/hr)
Limestone Railcar Pneumatic Conveying and Storage & pneumatic conveying from bulk storage silos	0.19

DRAFT

Emission Units	PM/PM10 Limits (lbs/hr)
Hydrocal Railcar Pneumatic Conveying and Storage	0.19
Mica Railcar Pneumatic Conveying and Storage & pneumatic conveying from bulk storage silos	0.19
Perlite Truck Pneumatic Conveying and Storage	0.094

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

**D.1.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]**

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Limits (lbs/hr)
Limestone Railcar Pneumatic Conveying and Storage & pneumatic conveying from bulk storage silos	0.07
Hydrocal Railcar Pneumatic Conveying and Storage	0.07
Mica Railcar Pneumatic Conveying and Storage & pneumatic conveying from bulk storage silos	0.07
Perlite Truck Pneumatic Conveying and Storage	0.034

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**D.1.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]**

Pursuant to 326 IAC 6.8-2-37, the PM10 emissions from each stack J11, J12 and J13 serving the raw material conveying and storage shall be limited to 0.015 grain per dry standard cubic foot (gr/dscf) and 0.190 pound per hour (lb/hr).

**D.1.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]**

- (a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from pneumatic truck unloading and storage controlled by baghouse JBH-16 shall not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf).
- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), the opacity from baghouse JBH-16 associated with the pneumatic truck unloading and storage shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

**D.1.5 Particulate Emission Limitations [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from one (1) pneumatic truck unloading facility and one (1) perlite storage silo exhausting to stack J-16 shall not exceed 0.03 gr/dscf.

**D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive

maintenance plan required by this condition.

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

#### **D.1.7 Particulate Control**

---

In order to ensure compliance with Condition D.1.1, D.1.2, D.1.3, and D.1.4, the baghouses for particulate control shall be in operation and control emissions from the raw material handling and storage system facilities at all times the raw material handling and storage system facilities are in operation.

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### **D.1.8 Visible Emissions Notations**

---

- (a) Visible emission notations of the raw material handling and storage system baghouses stack exhausts (J11, J12, J13 and J16) shall be performed once per day during normal daylight raw material bin filling 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit

#### **D.1.9 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with

DRAFT

abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

**D.1.10 Record Keeping Requirements**

---

- (a) To document the compliance status with Condition D.1.8, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) 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).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

A landplaster production process, consisting of the following equipment:

- (a) One (1) dryer mill bin #1, constructed in 1988, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, exhausting and exhausting through one (1) stack, identified as M-8.
- (b) One (1) dryer mill bin #2, constructed in 1999, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, exhausting and exhausting through one (1) stack, identified as M-12.
- (c) One (1) dryer mill #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (d) One (1) natural gas-fired burner for the dryer mill #1, constructed in 1988, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) screening station #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) dryer mill #2, constructed in 1988, with a maximum throughput of 35 tons per hour, and one (1) screening station #2 (hammer mill #2), with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (g) One (1) natural gas-fired burner for the dryer mill #2, constructed in 1988, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-12.
- (h) One (1) mill HRA landplaster bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one (1) stack, identified as M-19.
- (i) One (1) paper waste reclamation unit, constructed in 2007, with a maximum capacity of 5.0 tons per hour, with particulate emissions controlled by one (1) cyclone and one (1) baghouse dust collector, identified as DC WR-3, exhausting through one (1) stack, identified as WR-3.

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

DRAFT

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

### D.2.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Emission Limits (lbs/hr)
Dryer Mill #1 & Screen #1	4.15
Dryer Mill #2 & Screen #2	4.15
Mill HRA Landplaster bin	0.13
Paper Waste Reclamation	0.93

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

### D.2.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lbs/hr)
Dryer Mill #1 & Screen #1	1.51
Dryer Mill #2 & Screen #2	1.51
Mill HRA Landplaster bin	0.047
Paper Waste Reclamation	0.34

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

### D.2.3 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; dryer mill #1, exhausting to stack M-8, dryer mill #2, exhausting to stack M-12, one (1) mill HRA landplaster bin, exhausting to stack M-19 and one (1) paper waste reclamation unit, exhausting to stack WR-3 shall not exceed 0.03 gr/dscf.

### D.2.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]

- (a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from dryer mill #1 process and screening station #1, controlled by baghouse MBH-8 and dryer mill #2 process and screening station #2 controlled by baghouse MBH-12 each shall not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf).
- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), the opacity from baghouses MBH-8 and MBH-12 associated with the dryer mill #1 process and screening station #1 and dryer mill #2 process and screening station #2 each shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

DRAFT

#### D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

---

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

#### Compliance Determination Requirements [326 IAC 2-7-5(1)]

#### D.2.6 Particulate Control

---

In order to ensure compliance with Conditions D.2.1, D.2.2, D.2.3, and D.2.4, the baghouses for PM, PM10, and PM2.5 control shall be in operation and control emissions from the dryer mill #1 process & screening station #1, dryer mill #2 process & screening station #2, mill HRA landplaster bin and paper waste reclamation system facilities at all times the dryer mill #1 process & screening station #1, dryer mill #2 process & screening station #2, mill HRA landplaster bin and paper waste reclamation system facilities are in operation.

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.2.7 Testing Requirements [326 IAC 2-1.1-11]

---

- (a) In order to demonstrate compliance with Condition D.2.1, D.2.3, and D.2.4, the Permittee shall perform PM and PM10 testing of one (1) representative of the dryer mills (dryer mill #1 process and screening station #1, controlled by baghouse MBH-8 and dryer mill #2 process and screening station #2, controlled by baghouse MBH-12) utilizing methods as approved by the Commissioner at least once every five years from the date of the most recent valid compliance demonstration. The source will test the unit for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate compliance with Conditions D.2.2, the Permittee shall perform PM2.5 testing on one (1) representative of the dryer mills (dryer mill #1 process & screening station #1, controlled by baghouse MBH-8 and dryer mill #2 process & screening station #2, controlled by baghouse MBH-12) utilizing methods as approved by the Commissioner, and in accordance with the following schedule:
- (1) Not later than September 21, 2015 the source shall perform initial testing for PM2.5.
  - (2) Subsequent testing shall be performed at least once every five (5) years from the date of the most recent valid compliance demonstration.

The source will test the unit for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM2.5 includes filterable and condensable PM.

DRAFT

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

**D.2.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses MBH-8, MBH-12, and DCWR-3 controlling the dryer mill #1 process & screening station #1, dryer mill #2 process & screening station #2, and paper waste reclamation, respectively:

(A) Monitoring Approach

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator	PM Concentration	Pressure Differential	Opacity	Bag Condition
Measurement Approach	U.S. EPA Method 5, for PM, U.S. EPA Methods 201 A, for PM10 filterable and 202, for PM10 condensable or other Methods approved by the Commissioner – for each baghouse	Monitor pressure differential across the baghouses once per day	Method 9 visual observations during stack test.  Daily visible emission notations.	Visual inspection.
II. Indicator Range	Baghouses PM and PM10 emission limits in grain/dscf and pounds per hour	Baghouses pressure drop ranges  MBH-8, MBH-12 - 2 to 8 inches  DCWR-3 - 0.5 to 6 inches	An excursion is defined as an opacity measurement exceeding 10% on a 6-minute average.  Normal or abnormal.	An excursion is defined as failure to perform the quarterly inspection.
III. Performance Criteria				
A. Data Representativeness	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Procedures addressed in Method 9  Daily visible emission notations.	Baghouse inspected visually for bag leaks.
B. Verification of Operational Status	Fans amps and damper position.	Fans amps and damper position.	NA	NA
C. QA/QC Practices and Criteria	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Use of a certified visible emission observer.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Once every 5 years.	Once per day pressure drop reading	Once every 5 years for Method 9  Once daily for visible emission notations (when the emission unit is operating).	Quarterly
IV. Data Collection Procedures	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Daily visible emissions notations are recorded on V.E. Form.	Results of inspections and maintenance activities performed are recorded in baghouse maintenance log.
Averaging Period	Average of 3 test runs each 1 hour long	Average of 3 test runs each 1 hour long	Six-minute average during stack test	NA
E. Record Keeping	Maintain for a period of 5 years the results of the tests	Maintain for a period of 5 years the pressure drop readings	Maintain for a period of 5 years the daily visible emissions notations	Maintain for a period of 5 years the results of the baghouses inspections and maintenance
F. Reporting	-	Number, duration, cause of any excursions or exceedances and the	Number, duration, cause of any excursions or exceedances and the	-

DRAFT

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
		corrective actions taken	corrective actions taken	
Frequency	-	Quarterly	Quarterly	-

**D.2.9 Visible Emissions Notations**

- (a) Visible emission notations of the dryer mill #1 process & screening station #1, dryer mill #2 process & screening station #2, mill HRA landplaster bin, and paper waste reclamation system baghouse stack exhausts (M-8, M-12, M-19 and WR-3) 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit

**D.2.10 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

**D.2.11 Record Keeping Requirements**

- (a) To document the compliance status with Condition D.2.9, the Permittee shall maintain records of daily visible emission notations of the baghouse 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).

DRAFT

- (b) To document the compliance status with Condition D.2.8, the Permittee shall maintain daily records of pressure drop across the baghouses. 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).
- (c) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the baghouses controlling the dryer mill #1 process & screening station #1, dryer mill #2 process & screening station #2, and paper waste reclamation (if any are required).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

A stucco production process, consisting of the following equipment:

- (a) Two (2) kettle feed bins, known as kettle feed bin #1 and kettle feed bin #2, constructed in 1929, each with a maximum capacity of 60 tons, with particulate matter emissions controlled by three (3) baghouses. Emissions from kettle feed bin #1 will be controlled by two (2) baghouses, known as MBH-25 and MBH-28, and exhausting through two (2) stacks, identified as M-25 and M-28. Emissions from kettle feed bin #2 will be controlled by one (1) baghouse, known as MBH-27 and exhausting through one (1) stack, identified as M-27.
- (b) One (1) calcining kettle, known as calcining kettle #1A, constructed in 2006, with a maximum throughput of 11.5 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-22, and exhausting through one (1) stack, identified as M-22.
- (c) One (1) calcining kettle, known as calcining kettle #1B, constructed in 2007, with a maximum throughput of 12.0 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-26, and exhausting through one (1) stack, identified as M-26.
- (d) One (1) calcining kettle, known as calcining kettle #2, constructed in 1998, with a maximum throughput of 45 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-16, and exhausting through one (1) stack, identified as M-16.
- (e) One (1) natural gas-fired burner for calcining kettle #1A, constructed in 2007, with a heat input capacity of 7.5 MMBtu per hour, and exhausting through one (1) stack, identified as M-22.
- (f) One (1) natural gas-fired burner for calcining kettle #1B, constructed in 2006, with a heat input capacity of 7.5 million British thermal units per hour, and exhausting through one (1) stack, identified as M-26.
- (g) Six (6) natural gas-fired burners for the calcining kettle #2, constructed in 1998, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as M-14.
- (h) [RESERVED]
- (i) [RESERVED]
- (j) Miscellaneous stucco handling equipment, constructed in 1998, including one (1) #4 stucco elevator, one (1) #17 screw, and one (1) #17A screw, with a maximum throughput of 70 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the stucco handling system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (k) Stucco storage equipment, including one (1) #49 screw, and one (1) #47 screw, constructed in 1929, with a maximum capacity of seventy (70) tons per hour, and three

DRAFT

	stucco storage bins, known as #1, #2 and #3, each with a capacity of 175 tons, with particulate emissions controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
(l)	Stucco storage equipment, including one (1) #1 elevator and one (1) #27 screw, constructed in 1929, with a maximum capacity of seventy (70) tons per hour, and three (3) stucco storage bins, known as #4, #5 and #6, each with a capacity of 175 tons, with particulate emissions controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
(m)	One (1) stucco storage bin, constructed in 1999, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
(n)	A conveying system, constructed in 1988, consisting of belt and screw conveyors, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)	

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

**D.3.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Emission Limits (lb/hr)
Kettle feed bin #1	0.73
Kettle feed bin #2	0.57
Calcining kettle #1A	0.38
Calcining kettle #1B	0.38
Calcining kettle #2	1.13
Stucco Handling #17 & #17A screw conveyors, belt conveyors & stucco storage bin	0.86
Storage Screw Conveyors #47 & #49, & stucco storage bins #1, #2 and #3	
Elevator #1 screw conveyor #27, & stucco storage bins #4, #5 and #6	
Stucco surge bin loading & conveying	

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

DRAFT

**D.3.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]**

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lb/hr)
Kettle feed bin #1	0.26
Kettle feed bin #2	0.21
Calcining kettle #1A	0.38
Calcining Kettle #1B	0.38
Calcining kettle #2	1.13
Stucco Handling - #4 elevator, #17 and #17A screw conveyors, belt conveyors and stucco storage bin	0.31
Storage Screw Conveyors #47 & #49, & stucco storage bins #1, #2 and #3	
Elevator #1 screw conveyor #27, & stucco storage bins #4, #5 and #6	
Stucco surge bin loading & conveying	

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**D.3.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]**

Pursuant to 326 IAC 6.8-2-37,

- (a) the PM10 emissions from stack M-2 serving baghouse MBH-2 controlling stucco elevating and conveying shall be limited to 0.015 grain per dry standard cubic foot (gr/dscf) and 2.210 pounds per hour (lb/hr).

**D.3.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]**

- (a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
Kettle feed bin #1	Baghouse MBH-25 (stack M-25) and Baghouse MBH-28 (stack M-28)
Kettle feed bin #2	Baghouse MBH-27 (stack M-27)
Calcining kettles #1A	Baghouse MBH-22 (stack M-22)
Calcining kettle #1B	Baghouse MBH-26 (stack M-26)
Calcining kettle #2	Baghouse MBH-16 (stack M-16)
Stucco storage equipment (#49 screw, #47 screw and three stucco storage bins, #1, #2 and #3),	Baghouse MBH-24 (stack M-23)
Stucco storage equipment (#1 elevator, #27 screw, and three (3) stucco storage bins, as #4, #5 and #6)	Baghouse MBH-23 (stack M-23)

- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), opacity from each of the control devices controlling

DRAFT

the above material processing facilities shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

**D.3.5 Particulate Emission Limitations [326 IAC 6.8-1-2]**

---

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; kettle feed bin #1, exhausting to stacks M-25 and M-28, kettle feed bin #2, exhausting to stack M-27, calcining kettles #1A and #1B, exhausting to stack M-22 and stack M-26, respectively, and calcining kettle #2, exhausting to stack M-16, shall not exceed 0.03 gr/dscf.

**D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

---

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

**Compliance Determination Requirements [326 IAC 2-7-5(1)]**

**D.3.7 Particulate Control**

---

In order to ensure compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.4, and D.3.5, the baghouses for PM, PM10, and PM2.5 control shall be in operation and control emissions from the stucco production facilities at all times the stucco production facilities are in operation.

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.3.8 Testing Requirements [326 IAC 2-1.1-11]**

---

- (a) In order to demonstrate compliance with Condition D.3.1, D.3.3, D.3.4, and D.3.5, the Permittee shall perform PM and PM10 testing of one (1) representative of the calcining kettles (calcining kettles #1A and #1B controlled by baghouses MBH-22 and MBH-26, respectively, and calcining kettle #2 controlled by baghouse MBH-16) utilizing methods as approved by the Commissioner at least once every five years from the date of the most recent valid compliance demonstration. The source will test the unit for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate compliance with Conditions D.3.2, the Permittee shall perform PM2.5 testing on one (1) representative of the calcining kettles (calcining kettles #1A and #1B controlled by baghouses MBH-22 and MBH-26, respectively, and calcining kettle #2 controlled by baghouse MBH-16) utilizing methods as approved by the Commissioner, and in accordance with the following schedule:
- (1) Not later than September 21, 2015 the source shall perform initial testing for PM2.5.
  - (2) Subsequent testing shall be performed at least once every five (5) years from the date of the most recent valid compliance demonstration.

The source will test the unit for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this

DRAFT

condition. PM2.5 includes filterable and condensable PM.

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

**D.3.9 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses MBH-2, MBH-16, MBH-22, MBH-26, and MBH-28 controlling Kettle Feed Bins #1 and #2; stucco elevating and conveying; calcining kettle #2; calcining kettle #1A; and calcining kettle #1B; respectively:

(A) Monitoring Approach

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator	PM Concentration	Pressure Differential	Opacity	Bag Condition
Measurement Approach	U.S. EPA Method 5, for PM, U.S. EPA Methods 201 A, for PM10 filterable and 202, for PM10 condensable or other Methods approved by the Commissioner – for each baghouse	Monitor pressure differential across the baghouses once per day	Method 9 visual observations during stack test.  Daily visible emission notations.	Visual inspection.
II. Indicator Range	Baghouses PM and PM10 emission limits in grain/dscf and pounds per hour	Baghouses pressure drop ranges  0.5 to 6 inches	An excursion is defined as an opacity measurement exceeding 10% on a 6-minute average.  Normal or abnormal.	An excursion is defined as failure to perform the quarterly inspection.
III. Performance Criteria				
A. Data Representativeness	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Procedures addressed in Method 9  Daily visible emission notations.	Baghouse inspected visually for bag leaks.
B. Verification of Operational Status	Fans amps and damper position.	Fans amps and damper position.	NA	NA
C. QA/QC Practices and Criteria	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Use of a certified visible emission observer.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Once every 5 years.	Once per day pressure drop reading	Once every 5 years for Method 9  Once daily for visible emission notations (when the emission unit is operating).	Quarterly
IV. Data Collection Procedures	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Daily visible emissions notations are recorded on V.E. Form.	Results of inspections and maintenance activities performed are recorded in baghouse maintenance log.
Averaging Period	Average of 3 test runs each 1 hour long	Average of 3 test runs each 1 hour long	Six-minute average during stack test	NA
E. Record Keeping	Maintain for a period of 5 years the results of the tests	Maintain for a period of 5 years the pressure drop readings	Maintain for a period of 5 years the daily visible emissions notations	Maintain for a period of 5 years the results of the baghouses inspections and maintenance
F. Reporting	-	Number, duration, cause of any	Number, duration, cause of any	-

DRAFT

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
		excursions or exceedances and the corrective actions taken	excursions or exceedances and the corrective actions taken	
Frequency	-	Quarterly	Quarterly	-

**D.3.10 Visible Emissions Notations**

- (a) Visible emission notations of Kettle Feed Bins #1 and #2; stucco elevating & conveying; calcining kettle #2; calcining kettle #1A; and calcining kettle #1B; baghouse stack exhausts (M-2, M-16, M-22, M-26, and M-28) 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

**D.3.11 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

**D.3.12 Record Keeping Requirements**

- (a) To document the compliance status with Condition D.3.10, the Permittee shall maintain records of daily visible emission notations of the baghouse 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).

DRAFT

- (b) To document the compliance status with Condition D.3.9, the Permittee shall maintain daily records of pressure drop across the baghouse(s). 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).
- (c) To document the compliance status with Condition D.3.9, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the baghouses controlling Kettle Feed Bins #1 and #2; stucco elevating & conveying; calcining kettle #2; calcining kettle #1A; and calcining kettle #1B (if any are required).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

## SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, constructed in 1999, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, constructed in 1999, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) (HRA) landplaster feed bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting inside the building through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), constructed in 1999, with a maximum capacity of 10 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (e) One (1) HRA ball mill, constructed in 1999, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting inside the building through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) One (1) additive refill bin (starch) constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16A, and exhausting through one (1) stack, identified as B-16A and one (1) additive refill bin (sugar), constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting through stack B-16.
- (h) One (1) additive refill receiver (kaolinite), controlled by one (1) baghouse, identified as BBH-17, constructed in 1999, and exhausting inside the building through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and kaolinite), constructed in 1999, each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (kaolinite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.
- (j) One (1) additive surge bin (kaolinite), constructed in 1999, with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, constructed in 1999, with a maximum capacity of six (6) cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (l) One (1) paper fiber mill with cyclone separator, constructed in 1999, with a maximum

DRAFT

- throughput of 900 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (m) One (1) mixing screw conveyor, constructed in 1999, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
  - (n) One (1) natural gas-fired gauging water heater, constructed in 1999, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
  - (o) One (1) wet mixer, constructed in 1999, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
  - (p) One (1) wet zone kiln natural gas-fired burner, constructed in 1999, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
  - (q) One (1) dry zone kiln natural gas-fired burner, constructed in 1999, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
  - (r) One (1) wet end seal natural gas-fired burner, constructed in 1999, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
  - (s) One (1) dry end seal natural gas-fired burner, constructed in 1999, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
  - (t) One (1) wallboard drying kiln, constructed in 1999, with a maximum throughput of 90,000 square feet (1/2 inch equivalent) of wallboard per hour, and exhausting through one (1) main stack, identified as B-20.
  - (u) One (1) end saw, constructed in 1999, with a maximum throughput of 90,000 square feet (1/2 inch equivalent) of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.
  - (v) One (1) wallboard shredder, constructed in 1999, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses, identified as WRBH-1 and WRBH-2, and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively.
  - (w) One (1) existing dunnage saw, constructed in 1999, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

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

DRAFT

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

**D.4.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Emission Limits (lb/hr)
Stucco storage bin (1200 ton)	0.09
Stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer	1.51
Landplaster bin	0.19
USG 95 starch bin	0.19
Clay (kaolinite) bin	0.15
Sugar bin	0.11
Starch refill bin	0.11
Clay (kaolinite) feed bin & spare feeder	0.11
HRA ball mill, elevator, feed screw & sugar additive bin	0.19
End Saw & dunnage saw	3.39
Stamler wallboard shredder (WRBH-1)	1.13
Stamler wallboard shredder (WRBH-2)	1.13

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

**D.4.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]**

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lb/hr)
Stucco storage bin (1200 ton)	0.03
Stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer	0.55
Landplaster bin	0.07
USG 95 starch bin	0.07
Clay (kaolinite) bin	0.06
Sugar bin	0.04
Starch refill bin	0.04
Clay (kaolinite) feed bin & spare feeder	0.04
HRA ball mill, elevator, feed screw & sugar additive bin	0.07
End Saw & dunnage saw	1.24
Stamler wallboard shredder (WRBH-1)	0.41
Stamler wallboard shredder (WRBH-2)	0.41

DRAFT

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**D.4.3 Particulate Emission Limitations [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; one (1) stucco surge bin with hopper, exhausting through stack B-13, one (1) HRA ball mill exhausting inside the building through stack, B-18, one (1) additive refill bin (starch), controlled by one (1) baghouse, identified as BBH-16A, and exhausting through stack B-16A, one (1) additive refill bin (sugar), controlled by one (1) baghouse, identified as BBH-16, and exhausting through stack B-16, two (2) additive bulk storage bins (starch and kaolinite), exhausting to two (2) respective stacks B-14 and B-15; one (1) additive surge bin (kaolinite), one (1) paper fiber mill, one (1) mixing screw conveyor and one (1) wet mixer, with particulate matter controlled by one (1) baghouse, exhausting through stack B-13, one (1) end saw, one cut-back saw, exhausting through stack B-25 one (1) waste reclaim shredder, exhausting through two (2) stacks WR-1 and WR-2 shall not exceed 0.03 gr/dscf.

**D.4.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]**

(a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
Stucco storage bin (1200 ton)	Bin vent BBH -11 (stack B-11)
Stucco surge bin with hopper, HRA bin, paper fiber mill, mixing screw conveyor and wet mixer, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer	Baghouse BBH-13 (stack B-13)
HRA landplaster feedLandplaster bin	Bin vent BBH-12 (stack B-12)
USG 95 starch bin	Baghouse BBH-14 (stack B-14)
Clay (kaolinite) bin	Baghouse BBH-15 (stack B15)
HRA mill additive bin (sugar)	No Control (exhaust inside the building)
HRA ball mill	Baghouse BBH-18 (stack B-18)
Sugar bin	Baghouse BBH-16 (stack B-16)
Starch refill bin	Baghouse BBH-16A (stack B-16A)
Additive refill receiver (kaolinite),	Vacuum receiver BVH-17 (stack B-17)
Additive bulk storage bin (starch),	Baghouse BBH-14 (stack B-14)
Additive bulk storage bin (kaolinite)	Baghouse BBH-15 (stack B-15)
Additive surge bin (kaolinite),Clay (kaolinite) feed bin & spare feeder	Baghouse BBH-17(stack B-17)
HRA ball mill, elevator & feed screw, and sugar additive bin	Baghouse BBH-18 (stack B-18)
Glass fiber additive bin	No control (exhaust inside the building)
Wallboard drying kiln	No control (stack B-20)
End saw & dunnage saw	Baghouse BBH-25 (stack B-25)
Stamler wallboard shredder	2 Baghouses WRBH-1 (stack WR-1) and WRBH-2 (stack WR-2)

DRAFT

- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), opacity from each of the control devices controlling the above material processing facilities shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

#### D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

---

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

#### Compliance Determination Requirements [326 IAC 2-7-5(1)]

#### D.4.6 Particulate Control

---

In order to ensure compliance with Conditions D.4.1, D.4.2, D.4.3, and D.4.4, the baghouses for PM, PM10, and PM2.5 control shall be in operation and control emissions from the wallboard production facilities at all times the wallboard production facilities are in operation.

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.4.7 Testing Requirements [326 IAC 2-1.1-11]

---

- (a) In order to demonstrate compliance with Condition D.4.1, D.4.3, and D.4.4, the Permittee shall perform PM and PM10 testing of the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, controlled by baghouse BBH-13 and the end saw and dunnage saw controlled by baghouse BBH-25 utilizing methods as approved by the Commissioner at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate compliance with Conditions D.4.2, the Permittee shall perform PM2.5 testing on the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, controlled by baghouse BBH-13 and the end saw and dunnage saw controlled by baghouse BBH-25 utilizing methods as approved by the Commissioner, and in accordance with the following schedule:
- (1) Not later than September 21, 2015 the source shall perform initial testing for PM2.5 on the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, controlled by baghouse BBH-13.
  - (2) Not later than October 7, 2014 the source shall perform initial testing for PM2.5 on the end saw and dunnage saw controlled by baghouse BBH-25.
  - (2) Subsequent testing shall be performed at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM2.5

DRAFT

includes filterable and condensable PM.

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

**D.4.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses BBH-13, BBH-25, WRBH-1, and WRBH-2, controlling the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, one (1) end saw & dunnage saw and one (1) waste reclaim shredder, respectively:

(A) Monitoring Approach

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator	PM Concentration	Pressure Differential	Opacity	Bag Condition
Measurement Approach	U.S. EPA Method 5, for PM, U.S. EPA Methods 201 A, for PM10 filterable and 202, for PM10 condensable or other Methods approved by the Commissioner – for each baghouse	Monitor pressure differential across the baghouses once per day	Method 9 visual observations during stack test.  Daily visible emission notations.	Visual inspection.
II. Indicator Range	Baghouses PM and PM10 emission limits in grain/dscf and pounds per hour	Baghouses pressure drop ranges  0.5 to 6 inches	An excursion is defined as an opacity measurement exceeding 10% on a 6-minute average.  Normal or abnormal.	An excursion is defined as failure to perform the quarterly inspection.
III. Performance Criteria				
A. Data Representativeness	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Procedures addressed in Method 9  Daily visible emission notations.	Baghouse inspected visually for bag leaks.
B. Verification of Operational Status	Fans amps and damper position.	Fans amps and damper position.	NA	NA
C. QA/QC Practices and Criteria	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Use of a certified visible emission observer.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Once every 5 years.	Once per day pressure drop reading	Once every 5 years for Method 9  Once daily for visible emission notations (when the emission unit is operating).	Quarterly
IV. Data Collection Procedures	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Daily visible emissions notations are recorded on V.E. Form.	Results of inspections and maintenance activities performed are recorded in baghouse maintenance log.
Averaging Period	Average of 3 test runs each 1 hour long	Average of 3 test runs each 1 hour long	Six-minute average during stack test	NA
E. Record Keeping	Maintain for a period of 5 years the results of the tests	Maintain for a period of 5 years the pressure drop readings	Maintain for a period of 5 years the daily visible emissions notations	Maintain for a period of 5 years the results of the baghouses inspections and maintenance
F. Reporting	-	Number, duration, cause of any	Number, duration, cause of any	-

DRAFT

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
		excursions or exceedances and the corrective actions taken	excursions or exceedances and the corrective actions taken	
Frequency	-	Quarterly	Quarterly	-

**D.4.9 Visible Emissions Notations**

- (a) Visible emission notations of the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, two (2) additive bulk storage bins (starch and kaolinite), one (1) sugar bin, one (1) starch refill bin, one (1) end saw, one (1) dunnage saw and one (1) wallboard shredder baghouse stack exhausts (B-13, B14, B15, B-16, B-16A, WR-1 and WR-2) 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

**D.4.10 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

**D.4.11 Record Keeping Requirements**

- (a) To document the compliance status with Condition D.4.9, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the

DRAFT

reason for the lack of visible emission notation (e.g. the process did not operate that day).

- (b) To document the compliance status with Condition D.4.8, the Permittee shall maintain daily records of pressure drop across the baghouse(s). 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).
- (c) To document the compliance status with Condition D.4.8, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the baghouses controlling the stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer, one (1) end saw, one (1) dunnage saw and one (1) waste reclaim shredder (if any are required).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

## SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

A joint treatment process, consisting of the following equipment:

- (a) A pneumatic conveying system from the bulk storage silos to the scale hoppers, constructed in 1977, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, constructed in 1977, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, constructed in 1977, each with a maximum throughput of 5 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additive bag dump, constructed in 1977, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as JVH-3, and exhausting through one (1) stack, identified as J-3.
  - (3) Two (2) wet mixers, constructed in 1997, each with a maximum throughput of 7.25 tons per hour, controlled by baghouses JBH-1 and JBH-2, each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (4) One (1) Quick mixer, controlled by one (1) baghouse, identified as JVH-20.
  - (5) One (1) conveying system, controlled by one (1) baghouse, identified as JVH-3.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry joint additive dump and conveying system, constructed in 1995, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) vacuum receiver dust collector, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - (2) One (1) dry joint dust collector discharge return screw conveyor, constructed in 1995, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (3) One (1) dry joint mixer, constructed in 1977, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, constructed in 1977, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building through

DRAFT

stack J-14.

- (e) A dry texture paint line, consisting of the following equipment:
- (1) One (1) dry texture paint dust collector discharge return screw conveyor, constructed in 1995, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
  - (2) One (1) dry texture paint mixer, constructed in 1977, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
  - (3) One (1) packing machine, constructed in 1977, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
  - (4) One (1) dry paint weigh station, constructed in 1977, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.
  - (5) One (1) dry additive conveying system, constructed in 1977, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.
  - (6) One (1) additive bag dump, constructed in 1977, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.
- (f) A bag dump system serving the ready-mix, dry joint compound, and dry texture paint lines, consisting of the following equipment:
- (1) One (1) bag and tote dispensing system, identified as BT1, constructed in 2006, with a maximum throughput of 2,166 pounds of dry additives per hour, controlled by one dry cartridge filter dust collector, identified as JBH-17, exhausting inside the building.
  - (2) One (1) weighing and batching system identified as WB1, constructed in 2006, with a maximum throughput of 2,166 pounds of dry additives per hour, controlled by two (2) dry cartridge filter dust collectors, identified as JBH-18 and JBH-19, exhausting inside the building.

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

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

#### **D.5.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

DRAFT

Emission Units	PM/PM10 Emission Limits (lb/hr)
<b>Ready Mix Line</b>	
Mixer #1 & holding hopper	0.10
Mixer #2 & holding hopper	0.10
Dry additive bag dump & conveying	0.10
Quick Mixer	0.02
<b>Dry Joint Compound Line</b>	
Dry joint dust collector discharge return screw conveyor & dry joint mixer	0.34
Dry joint additive dump & conveying system	0.34
Dry joint packaging	0.38
<b>Dry Texture Paint Line</b>	
Dry texture paint mixer, dust collector discharge return screw conveyor, & packaging	0.19
Dry additive conveying system	0.03
<b>Bag Dump System</b>	
Dry paint weigh station & Additive bag dumping	0.38
Bag & Tote Dispensing System	0.19
Weighing & batching system side A	0.08
Weighing & batching system side B	0.08

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

**D.5.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]**

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lb/hr)
<b>Ready Mix Line</b>	
Mixer #1 & holding hopper	0.04
Mixer #2 & holding hopper	0.04
Dry additive bag dump & conveying	0.04
Quick Mixer	0.01
<b>Dry Joint Compound Line</b>	
Dry joint dust collector discharge return screw conveyor & dry joint mixer	0.12
Dry joint additive dump & conveying system	0.12
Dry joint packaging	0.14
<b>Dry Texture Paint Line</b>	
Dry texture paint mixer, dust collector discharge return screw conveyor, & packaging	0.07
Dry additive conveying system	0.01
<b>Bag Dump System</b>	
Dry paint weigh station & Additive bag dumping	0.14
Bag & Tote Dispensing System	0.07
Weighing & batching system side A	0.03

DRAFT

Emission Units	PM2.5 Emission Limits (lb/hr)
Weighing & batching system side B	0.03

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**D.5.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]**

Pursuant to 326 IAC 6.8-2-37, the PM10 emissions from each stack serving the following emission units shall be limited as follows:

Emission Units	Emission Limit (grain/dscf)	Emission Limit (lbs/hr)
<b>Wallboard manufacturing process</b>		
Each stack serving ready mix process, stacks J1, J2, and J3	0.017	0.100
<b>Dry texture paint process</b>		
Mixing and packing, stack J4	0.020	0.190
Bag dumping, stack J5	0.010	0.100
Dry additive conveying, stack J6	0.010	0.030
Additive bag dumping, stack J8	0.010	0.340
<b>Dry joint compound process</b>		
Mixing and packing, stack J7	0.020	0.340

**D.5.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]**

(a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
Quick mixer	Baghouse JVH-20
Packing machine	Baghouse JVH-14(stack J-14)
Dry paint weigh station	Baghouse JVH-21 (stack J-21)
Bag and tote dispensing system	Dry cartridge filter dust collector JBH-17, exhausting inside the building
Weighing and Batching system side A	Dry cartridge filter dust collector JBH-18, exhausting inside the building
Weighing and Batching system side B	Dry cartridge filter dust collector JBH-19, exhausting inside the building

(b) Pursuant to 326 IAC 6.8-10-3(7)(A), opacity from each of the control devices controlling the above material processing facilities shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

**D.5.5 Particulate Emission Limitations [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from one (1) dry paint weigh station, exhausting indoors through stack J-21 shall not exceed 0.03 gr/dscf.

**D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

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

DRAFT

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

### **D.5.7 Particulate Control**

---

In order to ensure compliance with Conditions D.5.1, D.5.2, D.5.3, D.5.4, and D.5.5, the baghouses for PM, PM10, and PM2.5 control shall be in operation and control emissions from the joint treatment process, dry joint compound production, dry texture paint production and bag dump system at all times the joint treatment process, dry joint compound production, dry texture paint production and bag dump system are in operation.

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.5.8 Testing Requirements [326 IAC 2-1.1-11]**

---

- (a) In order to demonstrate compliance with Condition D.5.1, D.5.3, and D.5.4, the Permittee shall perform PM and PM10 testing of the one (1) dry joint dust collector discharge return screw conveyor and one (1) dry joint mixer controlled by one (1) baghouse, JBH-7 utilizing methods as approved by the Commissioner at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate compliance with Condition D.5.2, the Permittee shall perform PM2.5 testing on the one (1) dry joint dust collector discharge return screw conveyor and one (1) dry joint mixer controlled by one (1) baghouse, JBH-7 utilizing methods as approved by the Commissioner, and in accordance with the following schedule:
- (1) Not later than October 6, 2014 the source shall perform initial testing for PM2.5 on the dry joint dust collector discharge return screw conveyor and one (1) dry joint mixer controlled by one (1) baghouse, JBH-7.
  - (2) Subsequent testing shall be performed at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM2.5 includes filterable and condensable PM.

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

### **D.5.9 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

---

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses JBH-7, JVH-8, JBH-14, and JBH-21 controlling the dry joint dust collector discharge return screw conveyor and dry joint mixer, dry joint additive dump & conveying system, dry joint packaging, and dry paint weigh station, respectively:

DRAFT

(A) Monitoring Approach

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator	PM Concentration	Pressure Differential	Opacity	Bag Condition
Measurement Approach	U.S. EPA Method 5, for PM, U.S. EPA Methods 201 A, for PM10 filterable and 202, for PM10 condensable or other Methods approved by the Commissioner – for each baghouse	Monitor pressure differential across the baghouses once per day	Method 9 visual observations during stack test.  Daily visible emission notations.	Visual inspection.
II. Indicator Range	Baghouses PM and PM10 emission limits in grain/dscf and pounds per hour	Baghouses pressure drop ranges:  0.5 to 6 inches for JBH-7, JBH-8, and JBH-14  0.5 to 2.5 inches for JBH-21	An excursion is defined as an opacity measurement exceeding 10% on a 6-minute average.  Normal or abnormal.	An excursion is defined as failure to perform the quarterly inspection.
III. Performance Criteria				
A. Data Representativeness	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Procedures addressed in Method 9  Daily visible emission notations.	Baghouse inspected visually for bag leaks.
B. Verification of Operational Status	Fans amps and damper position.	Fans amps and damper position.	NA	NA
C. QA/QC Practices and Criteria	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Use of a certified visible emission observer.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Once every 5 years.	Once per day pressure drop reading	Once every 5 years for Method 9  Once daily for visible emission notations (when the emission unit is operating).	Quarterly
IV. Data Collection Procedures	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Stack test using U.S. EPA Methods or other Methods approved by the Commissioner	Daily visible emissions notations are recorded on V.E. Form.	Results of inspections and maintenance activities performed are recorded in baghouse maintenance log.
Averaging Period	Average of 3 test runs each 1 hour long	Average of 3 test runs each 1 hour long	Six-minute average during stack test	NA
E. Record Keeping	Maintain for a period of 5 years the results of the tests	Maintain for a period of 5 years the pressure drop readings	Maintain for a period of 5 years the daily visible emissions notations	Maintain for a period of 5 years the results of the baghouses inspections and maintenance
F. Reporting	-	Number, duration, cause of any excursions or exceedances and the corrective actions taken	Number, duration, cause of any excursions or exceedances and the corrective actions taken	-
Frequency	-	Quarterly	Quarterly	-

D.5.10 Visible Emissions Notations

- (a) Visible emission notations of the dry joint dust collector discharge return conveyor & dry joint mixer, dry joint additive dump & conveying system, and dry paint weigh station

DRAFT

baghouse stack exhausts (J-7, J-8, and J-21) 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

#### D.5.11 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

#### D.5.12 Record Keeping Requirement

---

- (a) To document the compliance status with Condition D.5.10, the Permittee shall maintain records of daily visible emission notations of the baghouse 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).
- (b) To document the compliance status with Condition D.5.9, the Permittee shall maintain daily records of pressure drop across the baghouse(s). 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).
- (c) To document the compliance status with Condition D.5.9, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the baghouses controlling the dry joint dust collector discharge return conveyor & dry joint mixer, dry joint packaging, and

DRAFT

dry paint weigh station (if any are required).

- (d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

## SECTION D.6

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### Insignificant Activities:

- (a) A total of three (3) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) One (1) walboard paper baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
  - (1) One (1) natural gas-fired paper heater, constructed in 1999, with a heat input capacity of 2.2 MMBtu per hour. [326 IAC 6.8-1-2(a)]
  - (2) One (1) Bryan boiler producing hot water in the Board Plant Wet Room, constructed in 1999, with a heat input capacity of 5.00 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (3) Four (4) make up air units in the Board Plant, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr, each. [326 IAC 6.8-1-2(a)]
  - (4) One (1) make up air unit in the Joint Treatment Loading Department, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (5) One (1) process water heater in the Joint Treatment Department, constructed in 2005, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (6) One (1) process water heater in the Joint Treatment Department, constructed in 2011, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
- (e) A polypropylene bag grinding process, consisting of the following equipment:
  - (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3) Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

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

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

#### **D.6.1 Nonattainment Area Particulate Limitation [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the following units shall be limited to 0.03 gr/dscf:

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) One (1) wallboard paper baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, as follows:
  - (1) One (1) natural gas-fired paper heater, constructed in 1999, with a heat input capacity of 2.2 MMBtu per hour. [326 IAC 6.8-1-2(a)]
  - (2) One (1) Bryan boiler producing hot water in the Board Plant Wet Room, constructed in 1999, with a heat input capacity of 5.00 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (3) Four (4) make up air units in the Board Plant, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr, each. [326 IAC 6.8-1-2(a)]
  - (4) One (1) make up air unit in the Joint Treatment Loading Department, constructed in 1999, with a heat input capacity of 1.50 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (5) One (1) process water heater in the Joint Treatment Department, constructed in 2005, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
  - (6) One (1) process water heater in the Joint Treatment Department, constructed in 2011, with a heat input capacity of 0.502 MMBtu/hr. [326 IAC 6.8-1-2(a)]
- (d) The polypropylene bag grinding process.

#### **D.6.2 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control and Equipment Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
  - (1) Equip the degreaser with a cover.
  - (2) Equip the degreaser with a device for draining cleaned parts.
  - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

DRAFT

- (6) Store waste solvent only in closed containers.
  - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) Ensure the following additional control equipment and operating requirements are met:
- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) A refrigerated chiller.
    - (D) Carbon adsorption.
    - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
  - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
  - (3) If used, solvent spray:
    - (A) must be a solid, fluid stream; and
    - (B) shall be applied at a pressure that does not cause excessive splashing.

#### D.6.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

#### **Compliance Determination Requirement [326 IAC 2-7-5(1)]**

#### D.6.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

#### D.6.5 Record Keeping Requirements [326 IAC 8-3-8]

To document the compliance status with Condition D.6.3, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

- (a) The name and address of the solvent supplier.
- (b) The date of purchase.

DRAFT

- (c) The type of solvent purchased.
- (d) The total volume of the solvent purchased.
- (e) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

DRAFT

## SECTION E.1

## NSPS

### Emissions Unit Description:

A stucco production process, consisting of the following equipment:

- (b) One (1) calcining kettle, known as calcining kettle #1A, constructed in 2006, with a maximum throughput of 11.5 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-22, and exhausting through one (1) stack, identified as M-22.
- (c) One (1) calcining kettle, known as calcining kettle #1B, constructed in 2007, with a maximum throughput of 12.0 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as MBH-26, and exhausting through one (1) stack, identified as M-26.
- (d) One (1) calcining kettle, known as calcining kettle #2, constructed in 1998, with a maximum throughput of 45 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-16, and exhausting through one (1) stack, identified as M-16.

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

### New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(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 emission units listed above, except as otherwise specified in 40 CFR Part 60, Subpart UUU.
- (b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

#### E.1.2 Standards of Performance for Calciners and Dryers in Mineral Industries NSPS [326 IAC 12][40 CFR Part 60, Subpart UUU]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart UUU (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

- (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(c)
- (6) 40 CFR 60.736(a)
- (7) 40 CFR 60.736(b)

DRAFT

(8) 40 CFR 60.737

DRAFT

## SECTION E.2

## NSPS

### Emissions Unit Description:

A landplaster production process, consisting of the following equipment:

- (a) One (1) dryer mill bin #1, constructed in 1988, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, exhausting and exhausting through one (1) stack, identified as M-8.
- (b) One (1) dryer mill bin #2, constructed in 1999, with a maximum capacity of 60 tons and a throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, exhausting and exhausting through one (1) stack, identified as M-12.
- (c) One (1) dryer mill #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (d) One (1) natural gas-fired burner for the dryer mill #1, constructed in 1988, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) screening station #1, constructed in 1988, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) dryer mill #2, constructed in 1988, with a maximum throughput of 35 tons per hour, and one (1) screening station #2 (hammer mill #2), with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (h) One (1) mill HRA landplaster bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one (1) stack, identified as M-19.
- (i) One (1) paper waste reclamation unit, constructed in 2007, with a maximum capacity of 5.0 tons per hour, with particulate emissions controlled by one (1) cyclone and one (1) baghouse dust collector, identified as DC WR-3, exhausting through one (1) stack, identified as WR-3.

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (c) One (1) (HRA) landplaster feed bin, constructed in 1999, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting inside the building through one (1) stack, identified as B-12.
- (e) One (1) HRA ball mill, constructed in 1999, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting inside the building through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, constructed in 1999, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.

DRAFT

- (v) One (1) wallboard shredder, constructed in 1999, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses, identified as WRBH-1 and WRBH-2, and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively.

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

### **New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(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 emission units listed above, except as otherwise specified in 40 CFR Part 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

#### **E.2.2 Standards of Performance for Nonmetallic Mineral Processing Plants NSPS [326 IAC 12][40 CFR Part 60, Subpart OOO]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12, for the emissions units listed above:

- (1) 40 CFR 60.670(a)(1)
- (2) 40 CFR 60.670(e)
- (3) 40 CFR 60.670(f)
- (4) 40 CFR 60.671
- (5) 40 CFR 60.672(a)
- (6) 40 CFR 60.672(b)
- (7) 40 CFR 60.672(e)
- (8) 40 CFR 60.672(f)
- (9) 40 CFR 60.673(b)
- (10) 40 CFR 60.675
- (11) 40 CFR 60.676(f)
- (12) 40 CFR 60.676(h)
- (13) 40 CFR 60.676(i)
- (14) 40 CFR 60.676(j)
- (15) 40 CFR 60.676(k)
- (16) Table 1 to Subpart OOO of Part 60
- (17) Table 2 to Subpart OOO of Part 60
- (18) Table 3 to Subpart OOO of Part 60

DRAFT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: United States Gypsum Company  
Source Address: 301 Riley Road, East Chicago, Indiana 46312  
Part 70 Permit No.: T089-33640-00333

**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:

DRAFT

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

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: United States Gypsum Company  
Source Address: 301 Riley Road, East Chicago, Indiana 46312  
Part 70 Permit No.: T089-33640-00333

**This form consists of 2 pages**

**Page 1 of 2**

- |   |
|---|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• 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.</li></ul> |
|---|

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:

DRAFT

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 <sub>2</sub> , VOC, NO <sub>x</sub> , 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: \_\_\_\_\_

DRAFT

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

Source Name: United States Gypsum Company  
Source Address: 301 Riley Road, East Chicago, Indiana 46312  
Part 70 Permit No.: T089-33640-00333

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

Page 1 of 2

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

DRAFT

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**Technical Support Document (TSD) for a  
Part 70 Significant Permit Modification**

**Source Description and Location**

Source Name:	United States Gypsum Company
Source Location:	301 Riley Rd., East Chicago, Indiana 46312
County:	Lake
SIC Code:	3275 (Gypsum Products)
Operation Permit No.:	T089-33640-00333
Operation Permit Issuance Date:	November 19, 2014
Significant Permit Modification No.:	089-36567-00333
Permit Reviewer:	Joshua Levering

**Existing Approvals**

There have been no previous approvals issued to this source.

**County Attainment Status**

The source is located in Lake County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 <sup>th</sup> Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O <sub>3</sub>	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard. <sup>12</sup>
PM <sub>2.5</sub>	Unclassifiable or attainment effective February 6, 2012, for the annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

<sup>1</sup>The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard.

<sup>2</sup>The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.

(a) Ozone Standards

U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake County as nonattainment for ozone. On August 1, 2012, the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against U.S. EPA in the U.S. Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's

designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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 NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO<sub>x</sub> emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.

- (b) **PM<sub>2.5</sub>**  
Lake County has been classified as attainment for PM<sub>2.5</sub>. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**  
Lake 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.

### Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

### Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	112.92
PM <sub>10</sub>	118.63
PM <sub>2.5</sub>	48.96
SO <sub>2</sub>	0.61
NO <sub>x</sub>	73.52
VOC	34.29
CO	138.29
<b>Total HAPs</b>	5.98

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) These emissions are based upon Part 70 Operating Permit Renewal No. 089-33640-00333.
- (d) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by United States Gypsum Company on December 7, 2015, relating to a request to update the control devices to reflect current control device configurations. The modification will result in the removal of JBH-5 and JBH-15, the idling of MBH-1, and the addition of JBH-21, MBH-25, and MBH-27. Additionally, the source is requesting the removal of the 36.4% PM<sub>2.5</sub> to PM<sub>10</sub> allocation currently utilized in the calcining kettle PM<sub>2.5</sub> allowable emissions calculations. This will increase the limited emissions of PM<sub>2.5</sub> to the same rates as PM<sub>10</sub> for the three (3) Calcining kettles identified as #1A, #1B, and #2.

The following is a list of the modified emission units and pollution control devices:

A stucco production process, consisting of the following equipment:

- (a) Two (2) kettle feed bins, known as kettle feed bin #1 and kettle feed bin #2, constructed in 1929, each with a maximum capacity of 60 tons, with particulate matter emissions controlled by three (3) baghouses. Emissions from kettle feed bin #1 will be controlled by two (2) baghouses, known as MBH-25 and MBH-28, and exhausting through two (2) stacks, identified as M-25 and M-28. Emissions from kettle feed bin #2 will be controlled by one (1) baghouse, known as MBH-27 and exhausting through one (1) stack, identified as M-27.

A joint treatment process, consisting of the following equipment:

- (e) A dry texture paint line, consisting of the following equipment:
  - (4) One (1) dry paint weigh station, constructed in 1977, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.
  - (6) One (1) additive bag dump, constructed in 1977, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-21, installed in 2014, and exhausting indoors through one (1) stack, identified as J-21.

#### **Removed Emission Units**

The following emission unit is a duplicate description of kettle feed bin #1. This emission unit description will be removed from the permit, however, baghouse (MBH-28) and stack (M-28) will still control kettle feed bin #1 and will be added to its emission unit description.

A stucco production process, consisting of the following equipment:

- (h) One (1) LP bin, known as LP bin #1, constructed in 1929, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-28, and exhausting through one (1) stack, identified as M-28.

The following emission unit is physically onsite, however, it is permanently shut down, and will be removed from the permit:

A stucco production process, consisting of the following equipment:

- (i) One (1) hot pit, known as hot pit #3, constructed in 1929, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**Permit Level Determination – Part 70 Modification to an Existing Source**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

There is no increase in the potential to emit of any regulated pollutants associated with this modification. This modification is not subject to the source modification requirements under 326 IAC 2-7-10.5. The changes will be incorporated into the permit as a Significant Permit Modification under 326 IAC 2-7-12(d)(1), because the modified process does not qualify as a minor permit modification or administrative amendment.

**Permit Level Determination – PSD or Emission Offset**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Modification (tons/year)								
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs
Landplaster/Mill	40.98	40.98	14.92	--	--	--	--	--	--
Stucco/Mill	17.69	17.69	11.69	--	--	--	--	--	--
Board Plant	36.42	36.42	13.26	--	--	--	--	--	--
Joint Treatment	2.95	2.95	1.07	--	--	--	--	--	--

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Modification (tons/year)								
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs
New Bag Dump System	3.22	3.22	1.17	--	--	--	--	--	--
Ready Mix Line	1.41	1.41	0.51	--	--	--	--	--	--
Dry Joint Compound Line	4.66	4.66	1.69	--	--	--	--	--	--
Dry Texture Paint Line	0.96	0.96	0.35	--	--	--	--	--	--
Landplaster Dryers	0.33	1.31	1.31	0.10	17.18	0.94	14.43	20,734	0.32
Stucco Kettles	0.37	1.47	1.47	0.12	19.32	1.06	16.23	23,326	0.36
Wallboard Kiln Burners	2.36	5.52	5.52	0.35	28.77	30.75	100.70	69,192	4.98
Wallboard Accessory Burners	8.73x10 <sup>-2</sup>	0.35	0.35	2.76x10 <sup>-2</sup>	4.59	0.25	3.86	5,546	0.09
Adhesives and Inks	--	--	--	--	--	1.08	--	--	0.15
Natural Gas Combustion Insignificant Activities	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,000	0.11
<b>Total PTE of Entire Source</b>	<b>111.55</b>	<b>117.38</b>	<b>53.76</b>	<b>0.63</b>	<b>75.66</b>	<b>34.41</b>	<b>140.09</b>	<b>125,799</b>	<b>6.02</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	100	100	NA	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), PM <sub>10</sub> and PM <sub>2.5</sub> , not particulate matter (PM), are each considered as a regulated air pollutant". **PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .									

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing minor Emission Offset stationary source is not major because the emissions increase of NOx and VOC are less than the Emission Offset major source thresholds. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Since this source is considered a minor PSD source, and there is no increase in unrestricted potential to emit from this modification, this source has elected to revise the limits of existing emission units as follows:

Emission Units (Baghouse ID)	PM/PM10 Emissions Limit (lb/hr)	PM2.5 Emissions Limit lb/hr
<b>Stucco/Mill</b>		
Kettle feed bin #1 (MBH-25)	0.16	0.06
Kettle feed bin #2 (MBH-27)	0.57	0.21
Calcining kettle #1A (MBH-22)	0.38	0.38
Calcining kettle #1B (MBH-26)	0.38	0.38
Calcining kettle #2 (MBH-16)	1.13	1.13
<b>Bag Dump Station/Dry Texture Paint Line</b>		
Dry paint weigh station & Additive bag dumping (JBH-21)	0.38	0.14

Note: The Kettle feed bins #1 and #2 are now controlled by separate baghouses (MBH-25 and MBH-27), respectively; and the Dry paint weight station and Additive bag dumping are now controlled by a single baghouse (JBH-21), as part of this modification.

- (a) Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.
- (b) Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**Federal Rule Applicability Determination**

There is no change in the Federal Rule applicability due to this modification.

**State Rule Applicability Determination**

The following state rules are applicable to the source due to the modification:

**326 IAC 2-2 and 2-3 (PSD and Emission Offset)**

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

**326 IAC 2-7-6(5) (Annual Compliance Certification)**

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual

compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

**326 IAC 5-1 (Opacity Limitations)**

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(2).

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

Pursuant to 326 IAC 6-3-1(c)(3), the requirements of 326 IAC 6-3-2(e) are not applicable to the source because particulate matter emissions are limited by 326 IAC 6.8.

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

Pursuant to 326 IAC 6-5-1(a) (Fugitive Particulate Matter Emission Limitations), the source is not subject to 326 IAC 6-5 because the source is located in Lake County.

**326 IAC 6.8-8 (Continuous Compliance Plan)**

- (a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.
- (b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

**326 IAC 6.8-1-2 (Particulate Emission Limitations)**

The following emission units are subject to 326 IAC 6.8-1-2, because the source has particulate matter (PM) potential to emit of 100 tons per year or more and these facilities are not specifically listed in 326 IAC 6.8-2, 326 IAC 6.8-4, 326 IAC 6.8-5, and 326 IAC 6.8-8 through 326 IAC 6.8-11:

- (1) Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the following facilities shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf):
  - (a) One (1) dry paint weigh station, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-15, and exhausting through a stack, identified as J-15.

**326 IAC 6.8-10-3 (Particulate Matter Emission Limitations)**

The PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
Kettle feed bin #1	Baghouse MBH-25 (stack M-25)
Kettle feed bin #2	Baghouse MBH-27 (stack M-27)

**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.

There is no change to the compliance determination or monitoring requirements due to this modification.

### Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 089-33640-00333. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

1. The emissions unit descriptions in Section A.2 have been revised to update the baghouse IDs, and remove units that have been permanently shut down at the source.
2. Condition C.1 Opacity [326 IAC 5-1] has been added to the permit because the opacity limitations apply to all other facilities at the source that are not specifically regulated by 326 IAC 6.8-10-3 (included in the permit at Condition C.5).
3. The corresponding Part 70 rule cite [326 IAC 2-7-5(1)] has been added to the Compliance Determination Requirements heading in Condition D.1 through Condition D.6.
4. Condition D.3.3(a) is removed because baghouse MBH-1 is no longer in use, and the associated kettle feed bins #1 and #2, and associated baghouses have been added to Condition D.3.4.
5. Condition D.3 and D.5 have been changed to update PM/PM10/PM2.5 limits.
6. The federal language has been updated in Conditions E.1 and E.2.
7. The PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT form has been updated to clarify that reporting hours are daytime business hours.

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

\*\*\*

A stucco production process, consisting of the following equipment:

- (a) Two (2) kettle feed bins, known as kettle feed bin #1 and kettle feed bin #2, constructed in 1929, each with a maximum capacity of 60 tons, with particulate matter emissions controlled by ~~one (1)~~ **three (3)** baghouses. ~~identified as MBH-1 and exhausting through one (1) stack identified as M-1.~~ **Emissions from kettle feed bin #1 will be controlled by two (2) baghouses, known as MBH-25 and MBH-28, and exhausting through two (2) stacks, identified as M-25 and M-28. Emissions from kettle feed bin #2 will be controlled by one (1) baghouse, known as MBH-27 and exhausting through one (1) stack, identified as M-27.**

\*\*\*

- ~~(h) One (1) LP bin, known as LP bin #1, constructed in 1929, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-28, and exhausting through one (1) stack, identified as M-28.~~  
**[RESERVED]**

- ~~(i) One (1) hot pit, known as hot pit #3, constructed in 1929, with a maximum throughput of~~

~~30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.~~

**[RESERVED]**

\*\*\*

A joint treatment process, consisting of the following equipment:

\*\*\*

(e) A dry texture paint line, consisting of the following equipment:

\*\*\*

(4) One (1) dry paint weigh station, constructed in 1977, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4521, and exhausting **indoors** through one (1) stack, identified as J-4521.

\*\*\*

(6) One (1) additive bag dump, constructed in 1977, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-521, and exhausting **indoors** through one (1) stack, identified as J-521.

\*\*\*

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

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

- (a) **Opacity shall not exceed an average of twenty percent (20%) 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.**

\*\*\*

**D.3.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Emission Limits (lb/hr)
Kettle feed bin #1 and #2 and Kettle #3 hot pit	<del>0.93</del> <b>0.73</b>
<b>Kettle feed bin #2</b>	<b>0.57</b>
<del>LP bin #1</del>	<del>0.57</del>
Calcining kettle #1A	0.38
Calcining kettle #1B	0.38
Calcining kettle #2	1.13
Stucco Handling #17 & #17A screw conveyors, belt conveyors & stucco storage bin	0.86
Storage Screw Conveyors #47 & #49, & stucco storage bins #1, #2 and #3	
Elevator #1 screw conveyor #27, & stucco storage bins #4, #5 and #6	
Stucco surge bin loading & conveying	

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

**D.3.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]**

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lb/hr)
Kettle feed bin #1 and #2 and Kettle #3 hot pit	<del>0.340.26</del>
<b>Kettle feed bin #2</b>	<b>0.21</b>
<del>LP bin #1</del>	<del>0.21</del>
Calcining kettle #1A	<del>0.140.38</del>
Calcining Kettle #1B	<del>0.140.38</del>
Calcining kettle #2	<del>0.411.13</del>
Stucco Handling - #4 elevator, #17 and #17A screw conveyors, belt conveyors and stucco storage bin	0.31
Storage Screw Conveyors #47 & #49, & stucco storage bins #1, #2 and #3	
Elevator #1 screw conveyor #27, & stucco storage bins #4, #5 and #6	
Stucco surge bin loading & conveying	

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM2.5 emissions from the entire source to less than one-hundred (100) tons per twelve (12) consecutive month period, and therefore, renders the requirements of nonattainment major NSR, 326 IAC 2-1.1-5, not applicable with respect to PM2.5 emissions.

**D.3.3 PM10 Emission Limitations for Lake County [326 IAC 6.8-2-37]**

Pursuant to 326 IAC 6.8-2-37,

- ~~(a) the PM10 emissions from stack M-1 serving baghouse MBH-1 controlling drying, grinding, and calcining shall be limited to 0.012 grain per dry standard cubic foot (gr/dscf) and 3.210 pounds per hour (lb/hr).~~
- (ba) the PM10 emissions from stack M-2 serving baghouse MBH-2 controlling stucco elevating and conveying shall be limited to 0.015 grain per dry standard cubic foot (gr/dscf) and 2.210 pounds per hour (lb/hr).

**D.3.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]**

- (a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
<b>Kettle feed bin #1</b>	<b>Baghouse MBH-25 (stack M-25) and Baghouse MBH-28 (stack M-28)</b>
<b>Kettle feed bin #2</b>	<b>Baghouse MBH-27 (stack M-27)</b>
Calcining kettles #1A	Baghouse MBH-22 (stack M-22)
Calcining kettle #1B	Baghouse MBH-26 (stack M-26)
Calcining kettle #2	Baghouse MBH-16 (stack M-16)
<del>Kettle feed bin #3LP bin #1</del>	<del>Baghouse MBH-28 (stack M-28)</del>
Stucco storage equipment (#49 screw, #47 screw and three stucco storage bins, #1, #2 and #3),	Baghouse MBH-24 (stack M-23)
Stucco storage equipment (#1 elevator, #27 screw, and three (3) stucco storage bins, as #4, #5 and	Baghouse MBH-23 (stack M-23)

Material Processing Facility	Control ID
#6)	

- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), opacity from each of the control devices controlling the above material processing facilities shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

**D.3.5 Particulate Emission Limitations [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from each stack for the following emission units; **kettle feed bin #1, exhausting to stacks M-25 and M-28, kettle feed bin #2, exhausting to stack M-27**, calcining kettles #1A and #1B, exhausting to stack M-22 and stack M-26, respectively, **and** calcining kettle #2, exhausting to stack M-16, ~~and LP bin #1, exhausting to stack M-28~~ shall not exceed 0.03 gr/dscf.

\*\*\*

**D.3.9 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses ~~MBH-1, MBH-2, MBH-16, MBH-22, MBH-26, and MBH-28~~ controlling Kettle Feed Bins #1 and #2 ~~and Kettle #3 hot pit~~; stucco elevating and conveying; calcining kettle #2; calcining kettle #1A; **and** calcining kettle #1B; ~~and LP bin #1~~; respectively:

\*\*\*

**D.3.10 Visible Emissions Notations**

- (a) Visible emission notations of Kettle Feed Bins #1 and #2 ~~and Kettle #3 hot pit~~; stucco elevating & conveying; calcining kettle #2; calcining kettle #1A; **and** calcining kettle #1B; ~~and LP bin #1~~ baghouse stack exhausts (M-1, M-2, M-16, M-22, M-26, and M-28) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

\*\*\*

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

**D.3.12 Record Keeping Requirements**

\*\*\*

- (c) To document the compliance status with Condition D.3.9, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the baghouses controlling Kettle Feed Bins #1 and #2 ~~and Kettle #3 hot pit~~; stucco elevating & conveying; calcining kettle #2; calcining kettle #1A; **and** calcining kettle #1B; ~~and LP bin #1~~ (if any are required).

\*\*\*

**D.5.1 PM/PM10 Emissions Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]**

The Permittee shall comply with the following limits:

Emission Units	PM/PM10 Emission Limits (lb/hr)
Ready Mix Line	
Mixer #1 & holding hopper	0.10
Mixer #2 & holding hopper	0.10
Dry additive bag dump & conveying	0.10
Quick Mixer	0.02
Dry Joint Compound Line	
Dry joint dust collector discharge return screw conveyor & dry joint mixer	0.34
Dry joint additive dump & conveying system	0.34
Dry joint packaging	0.38
Dry Texture Paint Line	
Dry texture paint mixer, dust collector discharge	0.19

Emission Units	PM/PM10 Emission Limits (lb/hr)
return screw conveyor, & packaging	
<del>Additive bag dumping</del>	<del>0.10</del>
Dry additive conveying system	0.03
<b>Bag Dump System</b>	
Dry paint weigh station & <b>Additive bag dumping</b>	<del>0.44</del> <b>0.38</b>
Bag & Tote Dispensing System	0.19
Weighing & batching system side A	0.08
Weighing & batching system side B	0.08

Compliance with these limits, in conjunction with the PTE from all other emission units, shall limit the PM and PM10 emissions from the entire source to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, each, and therefore, renders the requirements of 326 IAC 2-2 (PSD), not applicable with respect to PM/PM10 emissions.

D.5.2 PM2.5 Nonattainment Major New Source Review (NSR) Minor Limits [326 IAC 2-1.1-5]

The Permittee shall comply with the following limits:

Emission Units	PM2.5 Emission Limits (lb/hr)
<b>Ready Mix Line</b>	
Mixer #1 & holding hopper	0.04
Mixer #2 & holding hopper	0.04
Dry additive bag dump & conveying	0.04
Quick Mixer	0.01
<b>Dry Joint Compound Line</b>	
Dry joint dust collector discharge return screw conveyor & dry joint mixer	0.12
Dry joint additive dump & conveying system	0.12
Dry joint packaging	0.14
<b>Dry Texture Paint Line</b>	
Dry texture paint mixer, dust collector discharge return screw conveyor, & packaging	0.07
<del>Additive bag dumping</del>	<del>0.04</del>
Dry additive conveying system	0.01
<b>Bag Dump System</b>	
Dry paint weigh station & <b>Additive bag dumping</b>	<del>0.15</del> <b>0.14</b>
Bag & Tote Dispensing System	0.07
Weighing & batching system side A	0.03
Weighing & batching system side B	0.03

\*\*\*

D.5.4 Particulate Emission Less Than Ten Microns (PM10) Limitations [326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM10 emissions from the following material processing facilities shall each not exceed twenty-two thousandths (0.022) grain per dry standard cubic foot (gr/dscf):

Material Processing Facility	Control ID
Quick mixer	Baghouse JVH-20
Packing machine	Baghouse JVH-14(stack J-14)
Dry paint weigh station	Baghouse JVH- <del>1521</del> (stack J- <del>1521</del> )
Bag and tote dispensing system	Dry cartridge filter dust collector JBH-17, exhausting inside the building

Material Processing Facility	Control ID
Weighing and Batching system side A	Dry cartridge filter dust collector JBH-18, exhausting inside the building
Weighing and Batching system side B	Dry cartridge filter dust collector JBH-19, exhausting inside the building

- (b) Pursuant to 326 IAC 6.8-10-3(7)(A), opacity from each of the control devices controlling the above material processing facilities shall not exceed 10%. Compliance with this opacity limit shall be determined using EPA Method 9.

D.5.5 Particulate Emission Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2, the particulate emissions from one (1) dry paint weigh station, exhausting **indoors** through stack J-4521 shall not exceed 0.03 gr/dscf.

\*\*\*

D.5.9 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for baghouses JBH-7, JVH-8, JBH-14, and J-4521 controlling the dry joint dust collector discharge return screw conveyor and dry joint mixer, dry joint additive dump & conveying system, dry joint packaging, and dry paint weigh station, respectively:

(A) Monitoring Approach

PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator	PM Concentration	Pressure Differential	Opacity	Bag Condition
Measurement Approach	U.S. EPA Method 5, for PM, U.S. EPA Methods 201 A, for PM10 filterable and 202, for PM10 condensable or other Methods approved by the Commissioner – for each baghouse	Monitor pressure differential across the baghouses once per day	Method 9 visual observations during stack test.  Daily visible emission notations.	Visual inspection.
II. Indicator Range	Baghouses PM and PM10 emission limits in grain/dscf and pounds per hour	Baghouses pressure drop ranges:  0.5 to 6 inches for <b>JBH-7, JBH-8, and JBH-14</b>  0.5 to 2.5 inches for <b>JBH-21</b>	An excursion is defined as an opacity measurement exceeding 10% on a 6-minute average.  Normal or abnormal.	An excursion is defined as failure to perform the quarterly inspection.

\*\*\*

D.5.10 Visible Emissions Notations

- (a) Visible emission notations of the dry joint dust collector discharge return conveyor & dry joint mixer, dry joint additive dump & conveying system, and dry paint weigh station baghouse stack exhausts (J-7, J-8, and J-4521) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

\*\*\*

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

\*\*\*

- (b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

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~~

E.1.2 Standards of Performance for ~~Nonmetallic Mineral Processing Plants~~ **Calciners and Dryers in Mineral Industries** NSPS [326 IAC 12] [40 CFR Part 60, Subpart UUU]

---

~~Pursuant to 40 CFR Part 60, Subpart UUU, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart UUU, (included as Attachment C to this permit), for the above listed emission units listed above: as specified as follows.~~

\*\*\*

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 in as 326 IAC 12-1, apply to the gypsum landplaster, HRA landplaster, and wallboard reclaim facilities described in this Section E.2 for the emission units listed above, except when as otherwise specified in 40 CFR 60, Subpart OOO.~~

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

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~~

E.2.42 Standards of Performance for ~~Nonmetallic Mineral Processing Plants~~ **Calciners and Dryers in Mineral Industries** NSPS [326 IAC 12] [40 CFR Part 60, Subpart OOO]

---

~~Pursuant to 40 CFR Part 60, Subpart OOO, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12 (included as Attachment B to this permit), for the above listed emissions units listed above: as specified as follows.~~

\*\*\*

PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT

Source Name: United States Gypsum Company  
Source Address: 301 Riley Road, East Chicago, IN 46312  
Part 70 Permit No.: 089-33640-00333

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) **daytime** 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.

### Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 089-36567-00333. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Joshua Levering at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emissions Calculations  
Modified Emission Units**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

**Controlled PTE of Existing Emission Units Before this Modification (tons/year)**

Operation	Control ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscf)	Control Efficiency	Controlled PTE			Limited Emissions					
					PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM <sup>1</sup> (lb/hr)	PM10 <sup>1</sup> (lb/hr)	PM2.5 <sup>2</sup> (lb/hr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)
<b>Stucco/Mill</b>													
Kettle feed bin #1 & #2	Baghouse (MBH-1)	9000	0.012	99%	4.05	4.05	4.05	0.93	0.93	0.34	4.05	4.05	1.48
Kettle #3 Hot pit													
Calcining kettle #1A	Baghouse (MBH-22)	2000	0.022	99%	1.65	1.65	1.65	0.38	0.38	0.14	1.65	1.65	0.60
Calcining kettle #1B	Baghouse (MBH-26)	2000	0.022	99%	1.65	1.65	1.65	0.38	0.38	0.14	1.65	1.65	0.60
Calcining kettle #2	Baghouse (MBH-16)	6000	0.022	99%	4.96	4.96	4.96	1.13	1.13	0.41	4.96	4.96	1.80
<b>Bag Dump System</b>													
Dry paint weigh station	Baghouse (JBH-15)	2200	0.022	99%	1.82	1.82	1.82	0.41	0.41	0.15	1.82	1.82	0.66
<b>Dry Texture Paint Line</b>													
Additive bag dumping	Baghouse (JBH-5)	1200	0.010	99%	0.45	0.45	0.45	0.10	0.10	0.04	0.45	0.45	0.16
<b>Total</b>					<b>14.58</b>	<b>14.58</b>	<b>14.58</b>				<b>14.58</b>	<b>14.58</b>	<b>5.31</b>

**Controlled PTE of Existing Emissions Units After this Modification (tons/year)**

Operation	Control ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscf)	Control Efficiency	Controlled PTE			Limited Emissions					
					PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM <sup>1</sup> (lb/hr)	PM10 <sup>1</sup> (lb/hr)	PM2.5 <sup>2</sup> (lb/hr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)
<b>Stucco/Mill</b>													
Kettle feed bin #1	Baghouse (MBH-25 and MBH-28)	3850	0.022	99%	3.18	3.18	3.18	0.73	0.73	0.26	3.18	3.18	1.16
Kettle feed bin #2	Baghouse (MBH-27)	3000	0.022	99%	2.48	2.48	2.48	0.57	0.57	0.21	2.48	2.48	0.90
Kettle #3 Hot pit (This emission unit is no longer in operation but still located at the source)	Baghouse (MBH-1)	This emission unit is permanently shut down, but still onsite.											
Calcining kettle #1A	Baghouse (MBH-22)	2000	0.022	99%	1.65	1.65	1.65	0.38	0.38	0.38	1.65	1.65	1.65
Calcining kettle #1B	Baghouse (MBH-26)	2000	0.022	99%	1.65	1.65	1.65	0.38	0.38	0.38	1.65	1.65	1.65
Calcining kettle #2	Baghouse (MBH-16)	6000	0.022	99%	4.96	4.96	4.96	1.13	1.13	1.13	4.96	4.96	4.96
<b>Bag Dump System</b>													
Dry paint weigh station													
Dry Texture Paint Line	Baghouse (JBH-21)	2000	0.022	99%	1.65	1.65	1.65	0.38	0.38	0.14	1.65	1.65	0.60
Additive bag dumping													
<b>Total</b>					<b>15.57</b>	<b>15.57</b>	<b>15.57</b>				<b>15.57</b>	<b>15.57</b>	<b>10.92</b>

**Change in PTE of this Modification (tons/year)**

Operation	Control ID	Controlled PTE			Limited Emissions								
		PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM <sup>1</sup> (lb/hr)	PM10 <sup>1</sup> (lb/hr)	PM2.5 <sup>2</sup> (lb/hr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)			
<b>Stucco/Mill</b>													
Kettle feed bin #1 & #2	Baghouses (MBH-25, MBH-27 and MBH-28)	1.60	1.60	1.60	0.37	0.37	0.13	1.60	1.60	0.58			
Kettle #3 Hot pit (This emission unit is no longer in operation but still located at the source)													
Calcining kettle #1A	Baghouse (MBH-22)	--	--	--	--	--	0.24	--	--	1.05			
Calcining kettle #1B	Baghouse (MBH-26)	--	--	--	--	--	0.24	--	--	1.05			
Calcining kettle #2	Baghouse (MBH-16)	--	--	--	--	--	0.72	--	--	3.15			
<b>Bag Dump System</b>													
Dry paint weigh station													
Dry Texture Paint Line	Baghouse (JBH-21)	-0.62	-0.62	-0.62	-0.14	-0.14	-0.05	-0.62	-0.62	-0.22			
Additive bag dumping													
<b>Total</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	<b>0.00</b>	<b>0.00</b>	<b>5.61</b>			

Notes:

1. PSD avoidance limits from T089-33640-00333
2. NaNSR avoidance limits from T089-33640-00333

Methodology:

Potential to Emit (tons/yr) = Air Flow Rate (DCFM) x Outlet Grain Loading (gr/dscf) / 7,000 (gr/lb) x 8,760 (hr/yr) / 2,000 (lb/ton)  
 Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) \* (100/(100-Control Efficiency))

**Appendix A: Emission Calculations  
PTE Summary**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Uncontrolled Potential to Emit (tons/yr)									
Emission Unit	PM	PM10	PM2.5 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	CO <sub>2</sub> e	Total HAPs
Landplaster/Mill	3972.79	3972.79	3972.79	--	--	--	--	--	--
Stucco/Mill	1769.02	1769.02	1769.02	--	--	--	--	--	--
Board Plant	3,642.41	3,642.41	3,642.41	--	--	--	--	--	--
Joint Treatment	294.71	294.71	294.71	--	--	--	--	--	--
New Bag Dump System	322.12	322.12	322.12	--	--	--	--	--	--
Ready Mix Line	141.38	141.38	141.38	--	--	--	--	--	--
Dry Joint Compound Line	465.53	465.53	465.53	--	--	--	--	--	--
Dry Texture Paint Line	95.73	95.73	95.73	--	--	--	--	--	--
Landplaster Dryers	0.33	1.31	1.31	0.10	17.18	0.94	14.43	20,734	0.32
Stucco Kettles	0.37	1.47	1.47	0.12	19.32	1.06	16.23	23,326	0.36
Wallboard Kiln Burners	2.36	5.52	5.52	0.35	28.77	30.75	100.70	69192.24	4.98
Wallboard Accessory Burners	0.09	0.35	0.35	0.03	4.59	0.25	3.86	5546.41	0.09
Adhesives and Inks	--	--	--	--	--	1.08	--	--	0.15
Natural gas-fired insignificant activities	0.11	0.44	0.44	0.03	5.80	0.32	4.87	6999.88	0.11
<b>Total not including fugitives</b>	<b>10706.94</b>	<b>10712.77</b>	<b>10712.77</b>	<b>0.63</b>	<b>75.66</b>	<b>34.41</b>	<b>140.09</b>	<b>125798.82</b>	<b>6.02</b>
Fugitive Emissions									
Paved Roads	1.88	0.38	0.09	--	--	--	--	--	--
Rock Shed Conveyors	1.87	0.88	0.13	--	--	--	--	--	--
Synthetic Gypsum Pile Loading	0.09	0.04	0.01	--	--	--	--	--	--
Synthetic Gypsum Pile Unpaved Roads	5.82	1.48	0.15	--	--	--	--	--	--
Synthetic Gypsum Pile Wind Erosion	5.37	1.88	1.88	--	--	--	--	--	--
<b>Total Fugitive Emissions</b>	<b>15.03</b>	<b>4.67</b>	<b>2.26</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

\* PM2.5 listed is direct PM2.5

Notes:

1. PM, PM10, and PM2.5 emissions from the Joint Treatment operations were calculated after consideration of the controls based on the integral to the process determination.
2. Source is not in one of the 28 listed categories and there are no applicable NSPS or NESHAPs that were in effect on August 1, 1980, therefore fugitive emission are not considered for Part 70, PSD, or EO applicability

**Appendix A: Emission Calculations  
PTE Summary**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Potential to Emit after Control (tons/yr)									
Emission Unit	PM	PM10	PM2.5 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	CO <sub>2</sub>	Total HAPs
Landplaster/Mill	39.73	39.73	39.73	--	--	--	--	--	--
Stucco/Mill	17.69	17.69	17.69	--	--	--	--	--	--
Board Plant	36.42	36.42	36.42	--	--	--	--	--	--
Joint Treatment	2.95	2.95	2.95	--	--	--	--	--	--
New Bag Dump System	3.22	3.22	3.22	--	--	--	--	--	--
Ready Mix Line	1.41	1.41	1.41	--	--	--	--	--	--
Dry Joint Compound Line	4.66	4.66	4.66	--	--	--	--	--	--
Dry Texture Paint Line	0.96	0.96	0.96	--	--	--	--	--	--
Landplaster Dryers	0.33	1.31	1.31	0.10	17.18	0.94	14.43	20,734	0.32
Stucco Kettles	0.37	1.47	1.47	0.12	19.32	1.06	16.23	23,326	0.36
Wallboard Kiln Burners	2.36	5.52	5.52	0.35	28.77	30.75	100.70	69,192	4.98
Wallboard Accessory Burners	0.09	0.35	0.35	0.03	4.59	0.25	3.86	5546.41	0.09
Adhesives and Inks	--	--	--	--	--	1.08	--	--	0.15
Natural gas-fired insignificant activities	0.11	0.44	0.44	0.03	5.80	0.32	4.87	6999.88	0.11
Paved Roads	0.94	0.19	0.05	--	--	--	--	--	--
Rock Shed Conveyors	1.87	0.88	0.13	--	--	--	--	--	--
Synthetic Gypsum Pile Loading	0.09	0.04	0.01	--	--	--	--	--	--
Synthetic Gypsum Pile Unpaved Roads	2.91	0.74	7.42E-02	--	--	--	--	--	--
Synthetic Gypsum Pile Wind Erosion	5.37	1.88	1.88	--	--	--	--	--	--
<b>Total</b>	<b>121.48</b>	<b>119.86</b>	<b>118.26</b>	<b>0.63</b>	<b>75.66</b>	<b>34.41</b>	<b>140.09</b>	<b>125,799</b>	<b>6.02</b>

\* PM2.5 listed is direct PM2.5

**Appendix A: Emission Calculations  
PTE Summary**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Emission Unit	Potential to Emit after Issuance (tons/yr)								
	PM	PM10	PM2.5 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	CO <sub>2e</sub>	Total HAPs
Landplaster/Mill	40.98	40.98	14.92	--	--	--	--	--	--
Stucco/Mill	17.69	17.69	11.69	--	--	--	--	--	--
Board Plant	36.42	36.42	13.26	--	--	--	--	--	--
Joint Treatment	2.95	2.95	1.07	--	--	--	--	--	--
New Bag Dump System	3.22	3.22	1.17	--	--	--	--	--	--
Ready Mix Line	1.41	1.41	0.51	--	--	--	--	--	--
Dry Joint Compound Line	4.66	4.66	1.69	--	--	--	--	--	--
Dry Texture Paint Line	0.96	0.96	0.35	--	--	--	--	--	--
Landplaster Dryers	0.33	1.31	1.31	0.10	17.18	0.94	14.43	20,734	0.32
Stucco Kettles	0.37	1.47	1.47	0.12	19.32	1.06	16.23	23,326	0.36
Wallboard Kiln Burners	2.36	5.52	5.52	0.35	28.77	30.75	100.70	69,192	4.98
Wallboard Accessory Burners	8.73E-02	0.35	0.35	2.76E-02	4.59	0.25	3.86	5,546	8.67E-02
Adhesives and Inks	--	--	--	--	--	1.08	--	--	0.15
Natural gas-fired insignificant activities	0.11	0.44	0.44	0.03	5.80	0.32	4.87	7,000	0.11
<b>Total not including fugitives</b>	<b>111.55</b>	<b>117.38</b>	<b>53.76</b>	<b>0.63</b>	<b>75.66</b>	<b>34.41</b>	<b>140.09</b>	<b>125,799</b>	<b>6.02</b>
Fugitive Emissions									
Paved Roads	0.94	0.19	0.05	--	--	--	--	--	--
Rock Shed Conveyors	1.87	0.88	0.13	--	--	--	--	--	--
Synthetic Gypsum Pile Loading	0.09	0.04	0.01	--	--	--	--	--	--
Synthetic Gypsum Pile Unpaved Roads	2.91	0.74	0.07	--	--	--	--	--	--
Synthetic Gypsum Pile Wind Erosion	5.37	1.88	1.88	--	--	--	--	--	--
<b>Total Fugitive Emissions</b>	<b>11.18</b>	<b>3.74</b>	<b>2.14</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

\* PM2.5 listed is direct PM2.5

**Notes:**

1. The shaded cells indicate where limits are included.
2. Source is not in one of the 28 listed categories and there are no applicable NSPS or NESHAPs that were in effect on August 1, 1980, therefore fugitive emission are not considered for Part 70, PSD, or EO applicability

**Appendix A: Emissions Calculations**  
**Landplaster/Mill, Stucco/Mill, and Board Plant Baghouses**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Operation	Control ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscfm)	Control Efficiency	Controlled PTE			Uncontrolled PTE			Controlled PTE			Limited Emissions					
					PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM (lbs/hr)	PM10 (lbs/hr)	PM2.5 (lbs/hr)	PM <sup>1</sup> (lb/hr)	PM10 <sup>1</sup> (lb/hr)	PM2.5 <sup>2</sup> (lb/hr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)
<b>Landplaster/Mill</b>																			
Dryer Mill #1 & Screen #1	Baghouse (MBH-8)	22,000	0.022	99.0%	18.17	18.17	18.17	1817.07	1817.07	1817.07	4.15	4.15	4.15	4.15	4.15	1.51	18.17	18.17	6.61
Dryer Mill #2 & Screen #2	Baghouse (MBH-12)	22,000	0.022	99.0%	18.17	18.17	18.17	1817.07	1817.07	1817.07	4.15	4.15	4.15	4.15	4.15	1.51	18.17	18.17	6.61
HRA landplaster bin	Baghouse (MBH-19)	500	0.022	99.0%	0.41	0.41	0.41	41.30	41.30	41.30	0.09	0.09	0.09	0.13	0.13	0.047	0.57	0.57	0.21
Paper Waste Reclamation	Baghouse (DCWR-3)	3600	0.022	99.0%	2.97	2.97	2.97	297.34	297.34	297.34	0.68	0.68	0.68	0.93	0.93	0.34	4.07	4.07	1.49
<b>Landplaster/Mill Subtotal</b>					<b>39.73</b>	<b>39.73</b>	<b>39.73</b>	<b>3972.79</b>	<b>3972.79</b>	<b>3972.79</b>							<b>40.98</b>	<b>40.98</b>	<b>14.92</b>
<b>Stucco/Mill</b>																			
Kettle feed bin #1	Baghouse (MBH-25)	850	0.022	99%	0.70	0.70	0.70	70.21	70.21	70.21	0.16	0.16	0.16	0.16	0.16	0.06	0.70	0.70	0.26
	Baghouse (MBH-28)	3000	0.022	99%	2.48	2.48	2.48	247.78	247.78	247.78	0.57	0.57	0.57	0.57	0.57	0.21	2.48	2.48	0.90
Kettle feed bin #2	Baghouse (MBH-27)	3000	0.022	99%	2.48	2.48	2.48	247.78	247.78	247.78	0.57	0.57	0.57	0.57	0.57	0.21	2.48	2.48	0.90
Calcining kettle #1A	Baghouse (MBH-22)	2000	0.022	99%	1.65	1.65	1.65	165.19	165.19	165.19	0.38	0.38	0.38	0.38	0.38	0.38	1.65	1.65	1.65
Calcining kettle #1B	Baghouse (MBH-26)	2000	0.022	99%	1.65	1.65	1.65	165.19	165.19	165.19	0.38	0.38	0.38	0.38	0.38	0.38	1.65	1.65	1.65
Calcining kettle #2	Baghouse (MBH-16)	6000	0.022	99%	4.96	4.96	4.96	495.57	495.57	495.57	1.13	1.13	1.13	1.13	1.13	1.13	4.96	4.96	4.96
Stucco Handling - #4 elevator, #17 and #17A screw conveyors, belt conveyors and stucco storage bin	Baghouse (MBH-2)	6700	0.015	99%	3.77	3.77	3.77	377.31	377.31	377.31	0.86	0.86	0.86	0.86	0.86	0.31	3.77	3.77	1.37
Storage Screw Conveyors #47 & #49, & stucco storage bins #1, #2 and #3																			
Elevator #1 screw conveyor #27, & stucco storage bins #4, #5 and #6																			
Stucco surge bin loading & conveying																			
<b>Stucco/Mill Subtotal</b>					<b>17.69</b>	<b>17.69</b>	<b>17.69</b>	<b>1769.02</b>	<b>1769.02</b>	<b>1769.02</b>							<b>17.69</b>	<b>17.69</b>	<b>11.69</b>
<b>Board Plant</b>																			
Stucco storage bin (1200 ton)	Vent Filter (BBH-11)	500	0.022	99%	0.41	0.41	0.41	41.30	41.30	41.30	0.09	0.09	0.09	0.09	0.09	0.03	0.41	0.41	0.15
Stucco surge bin, stucco conveying, stucco rotary screen, dry additives elevator & conveying, paper fiber feed bin & mixing, fiberglass feed bin, mixing conveyor, & wet mixer	Baghouse (BBH-13)	8000	0.022	99%	6.61	6.61	6.61	660.75	660.75	660.75	1.51	1.51	1.51	1.51	1.51	0.55	6.61	6.61	2.41
Landplaster bin	Baghouse (BBH-12)	1000	0.022	99%	0.83	0.83	0.83	82.59	82.59	82.59	0.19	0.19	0.19	0.19	0.19	0.07	0.83	0.83	0.30
USG 95 starch bin	Baghouse (BBH-14)	1000	0.022	99%	0.83	0.83	0.83	82.59	82.59	82.59	0.19	0.19	0.19	0.19	0.19	0.07	0.83	0.83	0.30
Clay (kaolinite) bin	Baghouse (BBH-15)	800	0.022	99%	0.66	0.66	0.66	66.08	66.08	66.08	0.15	0.15	0.15	0.15	0.15	0.05	0.66	0.66	0.24
Sugar bin	Baghouse (BBH-16)	600	0.022	99%	0.50	0.50	0.50	49.56	49.56	49.56	0.11	0.11	0.11	0.11	0.11	0.04	0.50	0.50	0.18
Starch refill bin	Baghouse (BBH-16A)	600	0.022	99%	0.50	0.50	0.50	49.56	49.56	49.56	0.11	0.11	0.11	0.11	0.11	0.04	0.50	0.50	0.18
Clay (kaolinite) feed bin & spare feeder	Baghouse (BBH-17)	600	0.022	99%	0.50	0.50	0.50	49.56	49.56	49.56	0.11	0.11	0.11	0.11	0.11	0.04	0.50	0.50	0.18
HRA ball mill, elevator, feed screw & sugar additive bin	Baghouse (BBH-18)	1000	0.022	99%	0.83	0.83	0.83	82.59	82.59	82.59	0.19	0.19	0.19	0.19	0.19	0.07	0.83	0.83	0.30
End Saw & dunnage saw	Baghouse (BBH-25)	18000	0.022	99%	14.87	14.87	14.87	1486.70	1486.70	1486.70	3.39	3.39	3.39	3.39	3.39	1.24	14.87	14.87	5.41
Stamler wallboard shredder	Baghouse (WRBH-1)	6000	0.022	99%	4.96	4.96	4.96	495.57	495.57	495.57	1.13	1.13	1.13	1.13	1.13	0.41	4.96	4.96	1.80
Stamler wallboard shredder	Baghouse (WRBH-2)	6000	0.022	99%	4.96	4.96	4.96	495.57	495.57	495.57	1.13	1.13	1.13	1.13	1.13	0.41	4.96	4.96	1.80
<b>Board Plant Subtotal</b>					<b>36.42</b>	<b>36.42</b>	<b>36.42</b>	<b>3642.41</b>	<b>3642.41</b>	<b>3642.41</b>							<b>36.42</b>	<b>36.42</b>	<b>13.26</b>

**Appendix A: Emissions Calculations**  
**Joint Treatment, Bag Dump, Ready Mix Line, Dry Joint Compound Line, and Dry Texture Paint Baghouses**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Operation	Control ID	Air Flow Rate (dscfm)	Outlet Grain Loading (gr/dscf)	Control Efficiency	Controlled PTE			Uncontrolled PTE			Controlled PTE			Limited Emissions						
					PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	PM (lbs/hr)	PM10 (lbs/hr)	PM2.5 (lbs/hr)	PM <sup>1</sup> (lb/hr)	PM10 <sup>1</sup> (lb/hr)	PM2.5 <sup>2</sup> (lb/hr)	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	
<b>Joint Treatment</b>																				
Limestone Railcar Unloading, Pneumatic Conveying and Storage, & pneumatic conveying from bulk storage silos	Baghouse (JBH-11)	1500	0.015	99%	0.84	0.84	0.84	84.47	84.47	84.47	0.19	0.19	0.19	0.19	0.19	0.07	0.84	0.84	0.31	
Hydrocal Railcar Unloading, Pneumatic Conveying and Storage, & pneumatic conveying from bulk storage silos	Baghouse (JBH-12)	1500	0.015	99%	0.84	0.84	0.84	84.47	84.47	84.47	0.19	0.19	0.19	0.19	0.19	0.07	0.84	0.84	0.31	
Mica Railcar Unloading, Pneumatic Conveying and Storage, & pneumatic conveying from bulk storage silos	Baghouse (JBH-13)	1500	0.015	99%	0.84	0.84	0.84	84.47	84.47	84.47	0.19	0.19	0.19	0.19	0.19	0.07	0.84	0.84	0.31	
Perlite Truck Unloading, Pneumatic Conveying and Storage, & pneumatic conveying from bulk storage silos	Baghouse (JBH-16)	500	0.022	99%	0.41	0.41	0.41	41.30	41.30	41.30	0.09	0.09	0.09	0.09	0.09	0.03	0.41	0.41	0.15	
<b>Joint Treatment Subtotal</b>					<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>294.71</b>	<b>294.71</b>	<b>294.71</b>							<b>2.95</b>	<b>2.95</b>	<b>1.07</b>	
<b>Bag Dump System</b>																				
Dry paint weigh station & Additive bag dumping (from Dry Texture Paint Line)	Baghouse (JBH-21)	2000	0.022	99%	1.65	1.65	1.65	165.2	165.2	165.2	0.38	0.38	0.38	0.38	0.38	0.14	1.65	1.65	0.60	
Bag & Tote Dispensing System	Baghouse (JBH-17)	1000	0.022	99%	0.83	0.83	0.83	82.6	82.6	82.6	0.19	0.19	0.19	0.19	0.19	0.07	0.83	0.83	0.30	
Weighing & batching system side A	Baghouse (JBH-18)	450	0.022	99%	0.37	0.37	0.37	37.2	37.2	37.2	0.08	0.08	0.08	0.08	0.08	0.03	0.37	0.37	0.14	
Weighing & batching system side B	Baghouse (JBH-19)	450	0.022	99%	0.37	0.37	0.37	37.2	37.2	37.2	0.08	0.08	0.08	0.08	0.08	0.03	0.37	0.37	0.14	
<b>Bag Dump Subtotal</b>					<b>3.22</b>	<b>3.22</b>	<b>3.22</b>	<b>322.12</b>	<b>322.12</b>	<b>322.12</b>							<b>3.22</b>	<b>3.22</b>	<b>1.17</b>	
<b>Ready Mix Line</b>																				
Mixer #1 & holding hopper	Baghouse (JBH-1)	700	0.017	99%	0.45	0.45	0.45	44.7	44.7	44.7	0.10	0.10	0.10	0.10	0.10	0.04	0.45	0.45	0.16	
Mixer #2 & holding hopper	Baghouse (JBH-2)	700	0.017	99%	0.45	0.45	0.45	44.7	44.7	44.7	0.10	0.10	0.10	0.10	0.10	0.04	0.45	0.45	0.16	
Dry additive bag dump & conveying	Dust Collector (JVH-3)	700	0.017	99%	0.45	0.45	0.45	44.7	44.7	44.7	0.10	0.10	0.10	0.10	0.10	0.04	0.45	0.45	0.16	
Quick mixer	Dust Collector (JVH-20)	89	0.022	99%	0.07	0.07	0.07	7.4	7.4	7.4	0.02	0.02	0.02	0.02	0.02	0.01	0.07	0.07	0.03	
<b>Ready Mix Subtotal</b>					<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>141.38</b>	<b>141.38</b>	<b>141.38</b>							<b>1.41</b>	<b>1.41</b>	<b>0.51</b>	
<b>Dry Joint Compound Line</b>																				
Screw reclaim conveyor & dry joint compound mixer	Baghouse (JBH-7)	2000	0.020	99%	1.50	1.50	1.50	150.2	150.2	150.2	0.34	0.34	0.34	0.34	0.34	0.12	1.50	1.50	0.55	
Dry joint additive dump & conveying system	Vacuum Receiver (JVH-8)	4000	0.010	99%	1.50	1.50	1.50	150.2	150.2	150.2	0.34	0.34	0.34	0.34	0.34	0.12	1.50	1.50	0.55	
Dry joint packaging	Baghouse (JBH-14)	2000	0.022	99%	1.65	1.65	1.65	165.2	165.2	165.2	0.38	0.38	0.38	0.38	0.38	0.14	1.65	1.65	0.60	
<b>Dry Joint Compound Subtotal</b>					<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>465.53</b>	<b>465.53</b>	<b>465.53</b>							<b>4.66</b>	<b>4.66</b>	<b>1.69</b>	
<b>Dry Texture Paint Line</b>																				
Dry texture Paint mixer, reclaim conveying, & packaging	Baghouse (JBH-4)	1100	0.020	99%	0.83	0.83	0.83	82.6	82.6	82.6	0.19	0.19	0.19	0.19	0.19	0.07	0.83	0.83	0.30	
Dry additive conveying system	Vacuum receiver (JVH-6)	350	0.010	99%	0.13	0.13	0.13	13.1	13.1	13.1	0.03	0.03	0.03	0.03	0.03	0.01	0.13	0.13	0.05	
<b>Dry Texture Paint Subtotal</b>					<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>95.73</b>	<b>95.73</b>	<b>95.73</b>							<b>0.96</b>	<b>0.96</b>	<b>0.35</b>	
<b>Total</b>					<b>107.04</b>	<b>107.04</b>	<b>107.04</b>	<b>10703.69</b>	<b>10703.69</b>	<b>10703.69</b>								<b>108.29</b>	<b>108.29</b>	<b>44.68</b>

- Notes:  
 1. PSD avoidance limits from T089-33640-00333  
 2. NaNSR avoidance limits from T089-33640-00333

Methodology:  
 Potential to Emit (tons/yr) = Air Flow Rate (DCFM) x Outlet Grain Loading (gr/dscf) / 7,000 (gr/lb) x 8,760 (hr/yr) / 2,000 (lb/ton)  
 Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (tons/yr) \* (100/(100-Control Efficiency))

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion - Landplaster Dryers Burners**  
**MM BTU/HR <100**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Emissions Units	Number	Capacity (MMBtu/hr)
Burner for Dryer Mill #1	1	20
Burner for Dryer Mill #2	1	20

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
40.0	1020	343.5

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.33	1.31	1.31	0.10	17.18	0.94	14.43

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 PM2.5 emission factor is filterable and condensable PM2.5 combined.  
 \*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu  
 MMCF = 1,000,000 Cubic Feet of Gas  
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8.760 hrs/yr x 1 MMCF/1,020 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**HAPS Calculations**

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03	
Potential Emission in tons/yr	3.61E-04	2.06E-04	1.29E-02	0.31	5.84E-04	<b>0.32</b>

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03	
Potential Emission in tons/yr	8.59E-05	1.89E-04	2.40E-04	6.53E-05	3.61E-04	<b>9.41E-04</b>

Methodology is the same as above.

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

<b>Total HAPs</b>	<b>0.32</b>
<b>Worst HAP</b>	<b>0.31</b>

**Greenhouse Gas Calculations**

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	20,612	0.40	0.38
Summed Potential Emissions in tons/yr	20,613		
CO2e Total in tons/yr	20,734		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion - Stucco Kettle Burners**  
**MM BTU/HR <100**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Emissions Units	Number	Capacity (MMBtu/hr)	Total (MMBtu/hr)
Burner for Kettle #1A	1	7.5	7.5
Burner for Kettle #1B	1	7.5	7.5
Burners for Kettle #2	6	5	30

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu	MMCF/yr
	mmscf	
45.0	1020	386.5

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.37	1.47	1.47	0.12	19.32	1.06	16.23

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

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

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

#### HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
	2.10E-03	1.20E-03	7.50E-02	1.80	3.40E-03	
Potential Emission in tons/yr	4.06E-04	2.32E-04	1.45E-02	0.35	6.57E-04	0.36

Emission Factor in lb/MMcf	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	9.66E-05	2.13E-04	2.71E-04	7.34E-05	4.06E-04	1.06E-03
					<b>Total HAPs</b>	<b>0.36</b>
					<b>Worst HAP</b>	<b>0.35</b>

Methodology is the same as above.

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

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

#### Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	23,188	0.44	0.43
Summed Potential Emissions in tons/yr	23,189		
CO2e Total in tons/yr	23,326		

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

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

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Appendix A: Emissions Calculations  
Natural Gas Combustion - Wallboard Kiln Burners  
MM BTU/HR <100**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Emissions Unit	Capacity (MMBtu/hr)
Wet zone kiln burner	67
Dry zone kiln burner	67

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
134.0	kiln 1020	1150.8

Emission Factor in lb/MMCF	Pollutant						
	PM <sup>1</sup>	PM10 <sup>1</sup>	direct PM2.5 <sup>1</sup>	SO2	NOx <sup>2</sup>	VOC	CO <sup>1</sup>
	4.1	9.6	9.6	0.6	50 **see below	53.4	175.0
Potential Emission in tons/yr	2.36	5.52	5.52	0.35	28.77	30.75	100.70

- Source requested emission factors based on May 2008 stack test of wet zone burner. PM2.5 emission factor is filterable and condensable PM2.5 combined.
- Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32  
Kiln has low NOx burners

**Methodology**

All emission factors are based on normal firing.  
MMBtu = 1,000,000 Btu  
MMCF = 1,000,000 Cubic Feet of Gas  
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**HAPS Calculations**

Emission Factor in lb/MMcf	HAPs - Organics <sup>3</sup>					Total - Organics
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.10E-03	1.20E-03	6.85E+00	1.80E+00	3.40E-03	
Potential Emission in tons/yr	1.21E-03	6.90E-04	3.94	1.04	1.96E-03	4.98

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	2.88E-04	6.33E-04	8.06E-04	2.19E-04	1.21E-03	3.15E-03

Methodology is the same as above.

<b>Total HAPs</b>	<b>4.98</b>
<b>Worst HAP</b>	<b>3.94</b>

- Formaldehyde emission factor requested by the source based on May 2008 stack test. Other organic HAP emission factors are the highest from AP-42, Table 1.4-3. Metals are the highest five values from AP-42, Table 1.4-4.

**Greenhouse Gas Calculations**

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	0.64
Potential Emission in tons/yr	69,049	1.32	0.37
Summed Potential Emissions in tons/yr	69,051		
CO2e Total in tons/yr	69,192		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion - Wallboard Process Burners**  
**MM BTU/HR <100**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Emissions Unit	Capacity (MMBtu/hr)
Wet end seal burner	2.5
Dry end seal burner	2.5
Water heater	3.5
Paper heater	2.2

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
10.7	1020	91.9

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
Potential Emission in tons/yr	0.09	0.35	0.35	0.03	4.59	0.25	3.86

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

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

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

#### HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					Total - Organics
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03	
Potential Emission in tons/yr	9.65E-05	5.51E-05	3.45E-03	0.08	1.56E-04	0.09

Emission Factor in lb/MMcf	HAPs - Metals					Total - Metals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	2.30E-05	5.05E-05	6.43E-05	1.75E-05	9.65E-05	2.52E-04
					<b>Total HAPs</b>	<b>0.09</b>
					<b>Worst HAP</b>	<b>0.08</b>

Methodology is the same as above.

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

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

#### Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	5,514	0.11	0.10
Summed Potential Emissions in tons/yr	5,514		
CO2e Total in tons/yr	5,546		

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

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

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Appendix A: Emissions Calculations  
Adhesives and Inks**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Material	Usage Rate (lb/yr)	VOC %	VOC Adhesives lb/hr*	PTE VOC from Adhesives tons/yr
Bundling (End Tape)	438,000	0.02%	0.02	0.04
Paper Edge	600,000	0.10%	0.12	0.30
<b>Total VOC from Adhesives</b>				<b>0.34</b>

Material	Usage Rate (gal/yr)	VOC (lb/gal)	VOC INK lb/hr*	PTE VOC from Inks tons/yr
Ink - Diagraph	630	2	0.25	0.63
Ink - Kiwi	30	6.95	0.04	0.10
<b>Total VOC from Inks</b>				<b>0.73</b>

\*All usage rates have been based on 2007 plant usage rates and 5,000 operating hours per year.  
The potential VOC emissions for both operations are < 15 lb/day and are insignificant activities.

Material	Usage Rate (gal/yr)	Ethylene Glycol (lb/gal)	HAP INK Ethylene Glycol lb/hr*	HAP Ink Emissions tons/yr
Ink - Diagraph	630	0.425	0.05	0.13
Ink - Kiwi	30	1.125	0.01	0.02
<b>Worst Case HAP/Total HAPs From Inks</b>				<b>0.15</b>

Methodology:

VOC PTE, (tons/yr) = Usage rate, lb/yr \* percent VOC, % \* ton/2000 lbs

HAP PTE, (tons/yr) = Usage rate, gal/yr \* lb/gal HAP \* ton/2000 lbs

**Appendix A: Emission Calculations  
Fugitive Dust Emissions - Paved Roads**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

**Paved Roads at Industrial Site**

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	1.0	101.0	101.0	15.0	1515.0	1452	0.275	27.8	10137.9
Vehicle (leaving plant) (one-way trip)	1.0	101.0	101.0	40.0	4040.0	1452	0.275	27.8	10137.9
<b>Totals</b>			<b>202.0</b>		<b>5555.0</b>			<b>55.6</b>	<b>20275.8</b>

Average Vehicle Weight Per Trip = 

27.5
------

 tons/trip  
 Average Miles Per Trip = 

0.28
------

 miles/trip

Unmitigated Emission Factor,  $E_f = [k * (sL)^{0.91} * (W)^{1.02}]$  (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.5	27.5	27.5	tons = average vehicle weight (provided by source)
sL =	0.6	0.6	0.6	g/m <sup>2</sup> = ubiquitous baseline value for roads with public access, AP-42 Table 13.2.1-2

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor,  $E_{ext} = E * [1 - (p/4N)]$  (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor,  $E_{ext} = E_f * [1 - (p/4N)]$   
 where p = 

125
-----

 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
 N = 

365
-----

 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	0.203	0.041	0.0100	lb/mile
Mitigated Emission Factor, $E_{ext} =$	0.186	0.037	0.0091	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	1.03	0.21	0.05	0.94	0.19	0.05	0.47	0.09	0.02
Vehicle (leaving plant) (one-way trip)	1.03	0.21	0.05	0.94	0.19	0.05	0.47	0.09	0.02
<b>Totals</b>	<b>2.06</b>	<b>0.41</b>	<b>0.10</b>	<b>1.88</b>	<b>0.38</b>	<b>0.09</b>	<b>0.94</b>	<b>0.19</b>	<b>0.05</b>

**Methodology**

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]  
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]  
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] \* [Maximum one-way distance (mi/trip)]  
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]  
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]  
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Mitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] \* [1 - Dust Control Efficiency]

**Abbreviations**

PM = Particulate Matter  
 PM10 = Particulate Matter (<10 um)  
 PM2.5 = Particle Matter (<2.5 um)  
 PTE = Potential to Emit

**Appendix A: Emissions Calculations**  
**Fugitive Emissions - Rock Shed Conveyors**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Fugitive emissions will result from the operation of conveyor belts transferring gypsum from barges and/or trucks into the rock shed. The worst case scenario would be when gypsum is offloaded from barge traffic with 3 outdoor transfer points. Inside the rock shed, the number of transfer points would be up to 4, including the loading hopper that begins the gypsum mill processing operation. The emissions estimated are based on emission factors from U.S. EPA AP-42, Section 13.2.4, dated November 2006 and estimated maximum facility operating data.

**Estimated Emissions (EF) Equation**

$$E \text{ (lb/ton)} = k * 0.0032 * ((U / 5) ^ 1.3 / (M/2) ^ 1.4) \quad \text{Eqn 1, English units}$$

$k =$  Particle size multiplier = 0.74 for PM (multiplier for PM <30 $\mu$ m used as surrogate)  
0.35 for PM10  
0.053 for PM2.5  
 $U =$  mean wind speed, mph = 10.3 source: NOAA data through 2011, <http://ggweather.com/ccd/avgwind.htm>, accessed 5/1/2014  
 $M =$  material moisture content, % = 8

**Material Transfer Emission Factor =**

**8.70E-04** lb PM/ton Gypsum/point  
**4.11E-04** lb PM10/ton Gypsum/point  
**6.23E-05** lb PM2.5/ton Gypsum/point

Transfer Description	Max Gypsum Rate ton/hr	Max Gypsum Rate ton/yr	Max Transfer Points	Uncontrolled PTE (tons/yr)			Controlled PTE (tons/yr)				
				PM	PM10	PM2.5	Control Method	Control Efficiency <sup>1</sup> %	PM	PM10	PM2.5
				ton/yr	ton/yr	ton/yr			ton/yr	ton/yr	ton/yr
Transfer from Barge/Truck to Rock Shed	70.00	613,200	3	0.80	0.38	0.06	None	0%	0.80	0.38	0.06
Transfers inside Rock Shed to Loading Hopper	70.00	613,200	4	1.07	0.50	0.08	Enclosure	0%	1.07	0.50	0.08
<b>TOTAL</b>				<b>1.87</b>	<b>0.88</b>	<b>0.13</b>			<b>1.87</b>	<b>0.88</b>	<b>0.13</b>

Equation 1 = AP-42 Chapter 13.2.4 for Aggregate Handling and Storage Piles. USG believes this equation to be the generally accepted method used in the industry for gypsum drops and movement. Addition of gypsum material by conveyor is an example of a drop operation. USG believes this equation is appropriate to cover all emissions associated with moving the material onto or off of the conveyor belts. The use of this equation is conservative since the original equation is meant for material being dropped greater than 5 feet, while USG's drops on belt feeders are generally one foot or less. Finally, the use of AP-42 Chapter 11.19.2 does not take into account the high moisture content of the gypsum and applying stone crushing factors to wet gypsum is not reasonable. Therefore, Section 13.2.4 will be used for estimating the conveyor emissions.

**Appendix A: Emissions Calculations**  
**Fugitive Emissions - Synthetic Gypsum Pile Loading**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

The following calculations determine the amount of emissions created by batch or continuous drop operations, based on 8,760 hours of use and USEPA's AP-42, 5th ed. (11/06), Section 13.2.4

$E = k * 0.0032 * (U / 5)^{1.3} / (M/2)^{1.4}$ <p>where E = emission factor (lb/ton of material transferred)</p> <p>U = <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">10.6</td></tr></table> mean wind speed, mph</p> <p>M = <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">8</td></tr></table> material moisture content, %</p>	10.6	8	<p>Eqn 1, English units</p> <p>provided by the source</p> <p>provided by the source</p>
10.6			
8			

PM	PM10	PM2.5
0.7	0.4	0.1

k = Particle size multiplier, from table, AP-42 page 13.2.4-4  
 PM30 value used as surrogate for PM

PM	PM10	PM2.5
9.03E-04	4.27E-04	6.47E-05

Emission factor, E = lb/ton of material transferred

Transfer Description	Throughput (tons/yr)	Uncontrolled PTE of PM (tons/yr)	Uncontrolled PTE of PM10 (tons/yr)	Uncontrolled PTE of PM2.5 (tons/yr)
Synthetic gypsum pile load-in	100,000	4.52E-02	2.14E-02	3.23E-03
Synthetic gypsum pile load-out	100,000	4.52E-02	2.14E-02	3.23E-03
<b>Totals:</b>		<b>9.03E-02</b>	<b>4.27E-02</b>	<b>6.47E-03</b>

**Note:**

This calculation from MSM 089-34702-00333

**Methodology**

Source, Chapter 13.2.4, AP-42 (11/06)

Uncontrolled PTE (tons/yr) = Throughput (tons/yr) x EF (lb/ton) / 2,000 (lb/ton)

**Appendix A: Emission Calculations  
Fugitive Dust Emissions  
Synthetic Gypsum Pile Unpaved Road Traffic**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

**Unpaved Roads at Industrial Site**

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Front-end Loader (empty)	1.0	54.8	55	15.0	822.0	132	0.025	1.4	500.1
Front-end Loader (loaded)	1.0	54.8	55	20.0	1096.0	132	0.025	1.4	500.1
Dump Trailers (empty)	1.0	11.0	11	12.5	137.5	1320	0.250	2.8	1003.8
Dump Trailers (loaded)	1.0	11.0	11	37.5	412.5	1320	0.250	2.8	1003.8
<b>Totals</b>			<b>132</b>		<b>2468.0</b>			<b>8.2</b>	<b>3007.6</b>

Average Vehicle Weight Per Trip = 18.8 tons/trip  
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor,  $E_f = k \left[ \frac{s}{12} \right]^a \left[ \frac{W}{3} \right]^b$  (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	18.8	18.8	18.8	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor,  $E_{ext} = E_f \left[ \frac{365 - P}{365} \right]$  (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor,  $E_{ext} = E_f \left[ \frac{365 - P}{365} \right]$   
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f$ =	5.89	1.50	0.15	lb/mile
Mitigated Emission Factor, $E_{ext}$ =	3.87	0.99	0.10	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Front-end Loader (empty)	1.47	0.38	3.75E-02	0.97	0.25	2.47E-02	0.48	0.12	1.23E-02
Front-end Loader (loaded)	1.47	0.38	3.75E-02	0.97	0.25	2.47E-02	0.48	0.12	0.01
Dump Trailers (empty)	2.95	0.75	0.08	1.94	0.50	4.95E-02	0.97	0.25	0.02
Dump Trailers (loaded)	2.95	0.75	0.08	1.94	0.50	4.95E-02	0.97	0.25	0.02
<b>Totals</b>	<b>8.85</b>	<b>2.26</b>	<b>0.23</b>	<b>5.82</b>	<b>1.48</b>	<b>0.15</b>	<b>2.91</b>	<b>0.74</b>	<b>7.42E-02</b>

**Note:**  
This calculation from MSM 089-34702-00333

**Methodology**

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]  
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]  
Maximum one-way miles (miles/day) = [Maximum trips per day (trip/day)] \* [Maximum one-way distance (mi/trip)]  
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]  
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per day (trip/day)]  
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) \* (Unmitigated Emission Factor (lb/mile)) \* (ton/2000 lbs)  
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) \* (Mitigated Emission Factor (lb/mile)) \* (ton/2000 lbs)  
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) \* (1 - Dust Control Efficiency)

**Abbreviations**

PM = Particulate Matter  
PM10 = Particulate Matter (<10 um)  
PM2.5 = Particulate Matter (<2.5 um)  
PTE = Potential to Emit

**Appendix A: Emissions Calculations**  
**Material Storage Piles**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$$

where  $E_f$  = emission factor (lb/acre/day)  
 $s$  = silt content (wt %)  
 $p$  = 125 days of rain greater than or equal to 0.01 inches  
 $f$  = 32 % of wind greater than or equal to 12 mph

Material	Silt Content (wt %) <sup>a</sup>	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)	Limited PTE of PM (tons/yr)	Limited PTE of PM10 (tons/yr)
Limestone	3.9	9.63	3.06	5.37	1.88
<b>Totals</b>				<b>5.37</b>	<b>1.88</b>

**Notes:**

This calculation from MSM 089-34702-00333  
 PM2.5 assumed equal to PM 10 because the reference does not have a factor for PM2.5

**Methodology**

Storage pile area calculated from capacity, bulk density, and pile height provide by the source:

$$A \text{ (acres)} = \text{capacity (tons)} \times \text{bulk density (ft}^3\text{/ton)} / \text{height (ft)} / 43,560 \text{ (ft}^2\text{/acre)}$$

where capacity = 100,000 tons  
 bulk density = 33.3 ft<sup>3</sup>/ton  
 height = 25 ft  
 and A = 3.06 acres

$$\text{Limited PTE of PM (tons/yr)} = [\text{Emission Factor (lb/acre/day)}] \cdot [\text{Maximum Pile Size (acres)}] \cdot (\text{ton}/2000 \text{ lbs}) \cdot (8760 \text{ hours/yr})$$

$$\text{Limited PTE of PM10 (tons/yr)} = [\text{Potential PM Emissions (tons/yr)}] \cdot 35\%$$

<sup>a</sup> Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)

**Abbreviations**

PM = Particulate Matter  
 PM10 = Particulate Matter (<10 um)  
 PTE = Potential to Emit

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

**Company Name:** United States Gypsum Co.  
**Address City IN Zip:** 301 Riley Rd., East Chicago, IN 46312  
**TV Operating Permit No.:** 089-33640-00333  
**Significant Permit Modification No.:** 089-36567-00333  
**Reviewer:** Joshua Levering  
**Date:** 2/10/2016

Natural gas fired insignificant activities including:

Description	Number	Rating (MMBtu/hr)	Total (MMBtu/hr)
Board Plant Boiler	1	5.00	5.00
Board Plant Air Make Up Unit	4	1.50	6.00
Joint Treatment Loading Dept. AMU	1	1.50	1.50
Joint Treatment Water Heater	2	0.502	1.00
		<b>Total:</b>	13.50

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
13.50	1020	116.0

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.11	0.44	0.44	0.03	5.80	0.32	4.87

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

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

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

#### HAPS Calculations

Emission Factor in lb/MMcf	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.22E-04	6.96E-05	4.35E-03	1.04E-01	1.97E-04	1.09E-01

Emission Factor in lb/MMcf	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.90E-05	6.38E-05	8.12E-05	2.20E-05	1.22E-04	3.18E-04

	<b>Total HAPs</b>	<b>0.11</b>
	<b>Worst HAP</b>	<b>0.10</b>

Methodology is the same as above.

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

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

#### Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	6,959	1.33E-01	1.28E-01
Summed Potential Emissions in tons/yr	6,959		
CO2e Total in tons/yr	7,000		

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

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

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

April 14, 2016

Mr. Phillip Weer  
United States Gypsum Company  
301 Riley Road  
East Chicago, IN 46312

Re: Public Notice  
United States Gypsum Company  
Permit Level: Title V Significant Permit Modification  
Permit Number: 089-36567-00333

Dear Mr. Weer:

Enclosed is a copy of your draft Title V Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Post Tribune in Merrillville, Indiana and The Times in Munster, Indiana publish the abbreviated version of the public notice no later than April 19, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the East Chicago Public Library, 2401 East Columbus Drive in East Chicago, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Joshua Levering, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-6543 or dial (317) 234-6543.

Sincerely,

*Vivian Haun*

Vivian Haun  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover letter 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## **ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

April 13, 2016

The Post Tribune  
1433 E. 83<sup>rd</sup> Avenue  
Merrillville, IN 46410

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for United States Gypsum Company, Lake County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 19, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

*Vivian Haun*

Vivian Haun  
Permit Branch  
Office of Air Quality

Permit Level: Title V Significant Permit Modification  
Permit Number: 089-36567-00333

Enclosure  
PN Newspaper.dot 8/27/2015



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

## **ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

April 13, 2016

The Times  
601 West 45<sup>th</sup> Avenue  
Munster, IN 46321

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for United States Gypsum Company, Lake County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 19, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

*Vivian Haun*

Vivian Haun  
Permit Branch  
Office of Air Quality

Permit Level: Title V Significant Permit Modification  
Permit Number: 089-36567-00333

Enclosure  
PN Newspaper.dot 8/27/2015



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

April 14, 2016

To: East Chicago Public Library

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: United States Gypsum Company**  
**Permit Number: 089-36567-00333**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures  
PN Library.dot 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## Notice of Public Comment

**April 14, 2016**  
**United States Gypsum Company**  
**089-36567-00333**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

**Please Note:** *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV). If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
PN AAA Cover.dot 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

## **AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD DRAFT INDIANA AIR PERMIT**

April 14, 2016

A 30-day public comment period has been initiated for:

**Permit Number: 089-36567-00333**  
**Applicant Name: United States Gypsum Company**  
**Location: East Chicago, Lake County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:

<http://www.in.gov/ai/appfiles/idem-caats/>

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

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

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at [chammack@idem.IN.gov](mailto:chammack@idem.IN.gov) or (317) 233-2414.

Affected States Notification.dot 2/17/2016

# Mail Code 61-53

IDEM Staff	VHAUN 4/14/2016 United States Gypsum Company 089-36567-00333 DRAFT			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Phillip Weer United States Gypsum Company 301 Riley Road East Chicago IN 46132 (Source CAATS)										
2		Dan Coyner Plant Manager United States Gypsum Company 301 Riley Road East Chicago IN 46132 (RO CAATS)										
3		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)										
4		Safety-Kleen Corp 601 Riley Rd East Chicago IN 46312 (Affected Party)										
5		East Chicago Public Library 2401 E Columbus Dr East Chicago IN 46312-2998 (Library)										
6		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)										
7		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)										
8		Shawn Sobocinski 1814 Laporte Street Portage IN 46368-1217 (Affected Party)										
9		Mark Coleman 8 Turret Rd. Portage IN 46368-1072 (Affected Party)										
10		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crown Point IN 46307 (Affected Party)										
11		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
12		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
13		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
14		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										
15		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
<b>15</b>			

# Mail Code 61-53

IDEM Staff	VHAUN 4/14/2016 United States Gypsum Company 089-36567-00333 DRAFT			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										
2		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										
3		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
4		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
5		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)										
6		Mr. John Wellspring Wilcox Environmental Engineering 5757 W 74th Street Indianapolis IN 46278 (Consultant)										
7												
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender  <b>6</b>	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on insured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--