NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Revision to a Federally Enforceable State Operating Permit (FESOP) for Giles Chemicals Premier Magnesia LLC in Dearborn County

Significant Permit Revision No.: 029-43705-00049

The Indiana Department of Environmental Management (IDEM) has received an application from Giles Chemicals Premier Magnesia LLC, located at 200 Brown St, Greendale, Indiana, 47025, for a significant revision of its FESOP issued on November 7, 2018. If approved by IDEM’s Office of Air Quality (OAQ), this proposed revision would allow Giles Chemicals Premier Magnesia LLC to make certain changes at its existing source. Giles Chemicals Premier Magnesia LLC has applied to add one (1) NG boiler (NGD-2), one (1) sparger in truck loading line. The source has also requested to add one (1) centrifuge (CEN-2), two (2) digesters, one primary and one secondary, identified as P-DIG 4 and S-DIG 4, one (1) cyclone (CY-1) added to Wet Scrubber WS- 2 and one (1) Filter press (FIL-2), each has negligible emissions or emissions that are included with other units emissions. In addition the source has requested to increase dryer (DRY-1) and screener (SCR-1) throughput.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, 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). The potential to emit regulated air pollutants will continue to be limited to less than the Title V and PSD major threshold levels. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

IDEM is aware that the one magnesium sulfate dryer, identified as DRY-1 has been modified prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft permit contains provisions to bring modified equipment into compliance with operation permit rules.

A copy of the permit application and IDEM’s preliminary findings have been sent to:

Lawrenceburg Public Library
150 Mary St
Lawrenceburg, IN 47025

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, IN 47220-9557

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

A copy of the application and preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.
How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th 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 SPR 029-43705-00049 in all correspondence.

Comments should be sent to:

Aasim Noveer  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for Aasim Noveer or (317) 234-1243  
Or dial directly: (317) 234-1243  
Fax: (317) 232-6749 attn: Aasim Noveer  
E-mail: ANoveer@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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/2358.htm; and the Citizens’ Guide to IDEM on the Internet at: https://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 and will also be sent to the local library indicated above, the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.
If you have any questions, please contact Aasim Noveer of my staff at the above address.

Ghassan Shalabi, Section Chief
Permits Branch
Office of Air Quality
Mr. Bruce Dixon  
Giles Chemicals Premier Magnesia, LLC  
200 Brown St.  
Greendale, IN 47025

Re: 029-43705-00049  
Significant Revision to  
F 029-40226-00049

Dear Mr. Dixon:

Giles Chemicals Premier Magnesia, LLC was issued a Federally Enforceable State Operating Permit (FESOP) No. 029-40226-00049 on November 7, 2018 for a stationary magnesium sulfate (epsom salt) manufacturing facility located at 200 Brown St, Greendale, IN 47025. On February 1, 2021, the Office of Air Quality (OAQ) received an application from the source requesting to add multiple units and to modify the dryer and screener throughputs.

The following is a list of the new and modified emission units and pollution control device(s):

New Units:

(a) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.

(b) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

The following are activities that have no/ negligible emissions or emissions that are included with other units emissions calculation.

(c) One (1) centrifuge identified as CEN-2 with a maximum process rate of 10 tons per hour using no controls, permitted in 2021 and exhausting to indoors.

(d) Two (2) digesters, one primary and one secondary, identified as P-DIG 4 and S-DIG 4, permitted in 2021, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.

(e) One (1) cyclone identified as CY-1 added to Wet Scrubber WS-2, permitted in 2021, with an inlet flow on WS-2 is 24,000 ACFM.

(f) One (1) Filter press identified as FIL-2, filters wet product, generating wet mud, permitted in 2021, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting indoors.

Modified units:
(g) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, approved in 2021 for modification with a maximum capacity of 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.

(h) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, approved in 2021 for modification with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using a Impinjet Scrubber (WS-2) as control and exhausting outdoors.

Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a Significant Permit Revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, the following emission units are approved for construction at the source:

(a) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.

(b) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, controlled by bag filter identified as BF-2 with estimated efficiency of 95% for PM control.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

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

Effective Date of the Permit

3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Commenced Construction

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the Significant Permit Revision into the permit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire FESOP as revised.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the
option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/2400.htm; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/6900.htm.

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

If you have any questions regarding this permit, please contact Aasim Noveer, 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) 234-1243 or (800) 451-6027, and ask for Aasim Noveer or (317) 234-1243.

Sincerely,

Ghassan Shalabi, Section Chief
Permits Branch
Office of Air Quality

Attachments: Revised permit and Technical Support Document.

cc: File - Dearborn County
Dearborn County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Southeast Regional Office
## New Source Construction and Federally Enforceable State Operating Permit

**OFFICE OF AIR QUALITY**

**Giles Chemicals Premier Magnesia, LLC**

200 Brown St

Greendale, Indiana 47025

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

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

<table>
<thead>
<tr>
<th>Operation Permit No.: F 029-40226-00049</th>
<th>Master Agency Interest ID: 15122</th>
</tr>
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<tbody>
<tr>
<td>Original signed by:</td>
<td>Issuance Date: November 7, 2018</td>
</tr>
<tr>
<td>Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality</td>
<td>Expiration Date: November 7, 2023</td>
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| Administrative Amendment No.: 029-42484-00049, issued on February 28, 2020 |
| Administrative Amendment No.: 029-42960-00049, issued on September 15, 2020 |

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<tr>
<th>Significant Permit Revision No.: 029-43705-00049</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued by: Ghassan Shalabi, Section Chief Permits Branch Office of Air Quality</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary magnesium sulfate (Epsom Salt) manufacturing facility.

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>200 Brown St, Greendale, Indiana 47025</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>(812) 537-4852</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2819</td>
</tr>
<tr>
<td>County Location:</td>
<td>Dearborn Outside Lawrenceburg Township</td>
</tr>
<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
</tr>
<tr>
<td>Source Status:</td>
<td>Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories</td>
</tr>
</tbody>
</table>

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

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

(a) Two (2) silos, identified as SILO-1 and SILO-2 for storing magnesium oxide, constructed in 2018, with a maximum storage capacity of 150 tons each, using a Flex-Kleen bag filter (BF-1) as control, and exhausting to outdoors.

(b) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, approved in 2021 for modification with a maximum capacity of 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.

(c) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, approved in 2021 for modification with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using a Impinjet Scrubber (WS-2) as control and exhausting outdoors.

(d) Three (3) packaging lines as follows:

   (i) Two (2) super sacks packaging lines that dump into sacks, identified as SACK-1 and SACK-2, constructed in 2018, with a maximum capacity of 17 tons per hour, using a Impinjet Scrubber (WS-2) as control, each, connected to its own bagger hopper.

   (ii) One (1) bagger packaging line, identified as BG-1, constructed in 2018, with a maximum throughput capacity of 8.5 tons per hour (50 pounds per bag), connected to its own bagger hopper and using no controls.

Note: The Bagger Hopper and Sack(s) Hopper(s) tops are each enclosed with a lid.

(e) One (1) surge bag hopper, identified as BGHOP -1, constructed in 2018, to receive the salt when there is a jam or short stoppage at the bagger, and has the maximum holding
capacity of 8.5 tons per hour, using a Impinjet Scrubber (WS-2) as control, and exhausting outdoors.

(f) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

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

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

(a) One (1) boiler, identified as NGD-1, constructed in 2018, with a maximum heat input capacity of 5.021 MMBtu per hour, combusting natural gas, and exhausting outdoors.

(b) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This source also includes the following insignificant activities:

(a) Two (2) sulfuric acid storage tanks, identified as SULF-1 and SULF-2, constructed in 2018, with maximum storage capacity of 32,000 gallons each, using no controls and exhausting to indoors.

(b) Two (2) primary digesters, identified as P-GID-1 and P-DIG-2, constructed in 2018, with a maximum capacity of 8,460 gallons each and maximum rating of 10 tons per hour, using no controls and steam exhausting outdoors.

(c) Two (2) secondary digesters, identified as S-GID-1 and S-DIG-2, constructed in 2018, with a maximum capacity of 5,922 gallons each and maximum rating of 10 tons per hour, using no controls and steam exhausting outdoors.

(d) Two (2) digesters, one primary and one secondary, identified as P-DIG 3 and S-DIG 3, permitted in 2020, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.

(e) One (1) filter press, identified as FIL-1, constructed in 2018, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting to indoors.

(f) One (1) centrifuge, identified as CEN-1, constructed in 2018, with a maximum process rate of 10 tons per hour, using no controls and exhausting to indoors.

(g) One (1) recycling tank to recycle unsaleable salt, identified as RT-1, constructed in 2018, with a maximum capacity of 4,706 gallons, using no controls and exhausting to indoors.

(h) One (1) centrifuge identified as CEN-2 with a maximum process rate of 10 tons per hour using no controls, permitted in 2021 and exhausting to indoors.

(i) Two (2) digesters, one primary and one secondary, identified as P-DIG 4 and S-DIG 4, permitted in 2021, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.
(j) One (1) cyclone identified as CY-1 added to Wet Scrubber WS- 2, permitted in 2021, with a inlet flow on WS-2 is 24,000 ACFM.

(k) One (1) Filter press identified as FIL-2, filters wet product, generating wet mud, permitted in 2021, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting indoors.

A.5 FESOP Applicability [326 IAC 2-8-2]

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

B.1 Definitions [326 IAC 2-8-1]
Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]
Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)][326 IAC 2-5.1-4][326 IAC 2-8]
This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

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

(a) This permit, F 029-40226-00049, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 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.6 Enforceability [326 IAC 2-8-6][IC 13-17-12]
Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
B.7 Severability [326 IAC 2-8-4(4)]
The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
This permit does not convey any property rights of any sort or any exclusive privilege.

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or determining 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.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

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

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and
(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

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

1. The appropriate identification of each term or condition of this permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
5. Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

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

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

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

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

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

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

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

B.14 Emergency Provisions [326 IAC 2-8-12]

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

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that 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 Southeast 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
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

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

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.
The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
<table>
<thead>
<tr>
<th>Section</th>
</tr>
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<tbody>
<tr>
<td><strong>B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]</strong></td>
</tr>
<tr>
<td>(a) All terms and conditions of permits established prior to F 029-40226-00049 and issued pursuant to permitting programs approved into the state implementation plan have been either:</td>
</tr>
<tr>
<td>(1) incorporated as originally stated,</td>
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<td>(2) revised, or</td>
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<tr>
<td>(3) deleted.</td>
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<tr>
<td>(b) All previous registrations and permits are superseded by this permit.</td>
</tr>
<tr>
<td><strong>B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]</strong></td>
</tr>
<tr>
<td>The Permittee’s right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.</td>
</tr>
<tr>
<td><strong>B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]</strong></td>
</tr>
<tr>
<td>(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an &quot;authorized individual&quot; as defined by 326 IAC 2-1.1-1(1).</td>
</tr>
<tr>
<td>(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:</td>
</tr>
<tr>
<td>(1) That this permit contains a material mistake.</td>
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<td>(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.</td>
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<tr>
<td>(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]</td>
</tr>
<tr>
<td>(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]</td>
</tr>
<tr>
<td>(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]</td>
</tr>
<tr>
<td><strong>B.18 Permit Renewal [326 IAC 2-8-3(h)]</strong></td>
</tr>
</tbody>
</table>
| (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a
certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (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 approval required by 326 IAC 2-8-11.1 has been obtained;
(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) Emission Trades [326 IAC 2-8-15(b)]

The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:
(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-8590 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.
For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.
SECTION C  SOURCE OPERATION CONDITIONS

Entire Source

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

C.1  Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

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

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

C.2  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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.
C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator 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.5 Fugitive Dust Emissions [326 IAC 6-4]

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

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.

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(c).

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

All required notifications shall be submitted to:

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

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

C.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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.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 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

(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.

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. 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 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

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

no later than 180 days from the date on which this source commences operation.

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, 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.13 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]
If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]
Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or
inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

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

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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 FESOP.

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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.18 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.
### EMISSIONS UNIT OPERATION CONDITIONS

**SECTION D.1**

**Emissions Unit Description:**

(a) Two (2) silos, identified as SILO-1 and SILO-2 for storing magnesium oxide, constructed in 2018, with a maximum storage capacity of 150 tons each, using a Flex-Kleen bag filter (BF-1) as control, and exhausting to outdoors.

(c) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using an Impinjet Scrubber (WS-2) as control and exhausting outdoors.

(d) Three (3) packaging lines as follows:

   (i) Two (2) super sacks packaging lines that dump into sacks, identified as SACK-1 and SACK-2, constructed in 2018, with a maximum capacity of 17 tons per hour, each connected to its own bagger hopper.

   (ii) One (1) bagger packaging line, identified as BG-1, constructed in 2018, with a maximum throughput capacity of 8.5 tons per hour (50 pounds per bag), connected to its own bagger hopper.

   Note: The Bagger Hopper and Sack(s) Hopper(s) tops are each enclosed with a lid.

(e) One (1) surge bag hopper, identified as BGHOP -1, constructed in 2018, to receive the salt when there is a jam or short stoppage at the bagger, and has the maximum holding capacity of 8.5 tons per hour, using an Impinjet Scrubber (WS-2) as control, and exhausting outdoors.

   Note: bag hopper, identified as BGHOP -1 top is enclosed with a lid.

(f) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

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

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

**D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2]**

Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from the two (2) silos, magnesium sulfate screener, two (2) super sacks, bagger, bag hopper and Sparger, shall not exceed 0.03 grains per dry standard cubic feet (dscf), each.

**D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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

**Compliance Determination Requirements [326 IAC 2-8-4(1)]**

**D.1.3 Particulate Control**

(a) In order to assure compliance with Condition D.1.1, the Flex-Kleen Bag Filter (BF-1) and the bag filter (BF-2) for particulate control shall be in operation and control emissions.
from the two (2) silos and Sparger at all times the two (2) silos and Sparger are in operation.

(b) In order to assure compliance with Condition D.1.1, a metal shell enclosure and lid enclosure for particulate control shall be in operation and control emissions from the magnesium sulfate screener, identified as SCR-1, Sack 1, Sack 2, Bagger Unloading and bag hopper, identified as BGHOP-1, at all times these emission units are in operation.

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

D.1.4 Broken or Failed Bag Detection

(a) For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit 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 emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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.

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

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the two (2) silos and sparger stack exhaust shall be performed during normal daylight operations A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the two (2) silos and sparger stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.
SECTION D.2  EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(b) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, approved in 2021 for modification with a maximum capacity of 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.

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

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

**D.2.1 PSD PM Minor Limit [326 IAC 2-2]**

In order to render the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2- and 326 IAC 2-7 not applicable, the Permittee shall comply with the following:

(a) the PM emission from the dryer DRY-1, shall not exceed 13.0 pounds per hour.

Compliance with this limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per 12 consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

**D.2.2 FESOP and PSD PM10 and PM2.5 Limits [326 IAC 2-2] [326 IAC 2-8-4]**

In order to render the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2- and 326 IAC 2-7 not applicable, the Permittee shall comply with the following:

(a) The PM10 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

(b) The PM2.5 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

**D.2.3 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2]**

Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from magnesium sulfate dryer DRY-1 shall not exceed 0.03 grains per dry standard cubic feet (dscf).

**D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan is required for this facility and its control device. 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 2-8-4(1)]**

D.2.5 Particulate Control
In order to assure compliance with Conditions D.2.1, D.2.2 and D.2.3 the wet scrubber WS-1 used to control particulate emissions from the dryer (DRY-1) shall be in operation and control emissions from the dryer (DRY-1) at all times the dryer (DRY-1) is in operation.

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

D.2.6 Scrubber Flow Rate [326 IAC 2-2]

(a) The Permittee shall monitor and record the flow rate of the wet scrubber WS-1 at least once per day when the associated processes are in operation. From the date of startup until the stack test results are available, the Permittee shall maintain the flow rate at or above the minimum of 25 gallons per minute (gpm).

(b) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.2.1, D.2.2 and D.2.3.

(c) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(d) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.7 Visible Emissions Notations

(a) Visible emission notations of the Wet Scrubber (WS-1) stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take 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.2.8 Wet Scrubber Failure Detection

In the event that a wet scrubber malfunction has been observed:

(a) For a wet scrubber controlling emissions from a process operated continuously, a failed unit and the associated process will 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 wet scrubber 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).

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

D.2.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.6, the Permittee shall maintain daily records of scrubber flow rate for wet scrubber WS-1. The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of a flow rate reading (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.8 - Visible Emissions Notations, the Permittee shall maintain records of daily visible emission notations of the Wet Scrubber (WS-) 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).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.
### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

<table>
<thead>
<tr>
<th><strong>Emissions Unit Description:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specifically regulated Insignificant Activities:</strong></td>
</tr>
<tr>
<td>(a) One (1) boiler, identified as NGD-1, constructed in 2018, with a maximum heat input capacity of 5.021 MMBtu per hour, combusting natural gas, and exhausting outdoors.</td>
</tr>
<tr>
<td>(b) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th><strong>D.3.1 Particulate [326 IAC 6.5-1-2]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pursuant to 326 IAC 6.5-1-2(b)(3), particulate emissions from the boiler NGD-1 and NGD-2 shall not exceed 0.01 grains per dry standard cubic feet (dscf) of natural gas burned.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.</td>
</tr>
</tbody>
</table>
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION

Source Name: Giles Chemicals Premier Magnesia, LLC
Source Address: 200 Brown St, Greendale, Indiana 47025
FESOP Permit No.: F 029-40226-00049

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter
☐ Test Result (specify)___________________________________________________
☐ Report (specify)_______________________________________________________
☐ Notification (specify)__________________________________________________
☐ Affidavit (specify)_____________________________________________________
☐ Other (specify)_________________________________________________________

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

Signature: ___________________________________________________________

Printed Name: _______________________________________________________

Title/Position: _______________________________________________________

Date: ___________________________
This form consists of 2 pages

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 2-8-12

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

| Facility/Equipment/Operation: |
| Control Equipment: |
| Permit Condition or Operation Limitation in Permit: |
| Description of the Emergency: |
| Describe the cause of the Emergency: |
If any of the following are not applicable, mark N/A

<table>
<thead>
<tr>
<th>Date/Time Emergency started:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Emergency was corrected:</td>
</tr>
<tr>
<td>Was the facility being properly operated at the time of the emergency?</td>
</tr>
<tr>
<td>Describe:</td>
</tr>
<tr>
<td>Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NOₓ, CO, Pb, other:</td>
</tr>
<tr>
<td>Estimated amount of pollutant(s) emitted during emergency:</td>
</tr>
<tr>
<td>Describe the steps taken to mitigate the problem:</td>
</tr>
<tr>
<td>Describe the corrective actions/response steps taken:</td>
</tr>
<tr>
<td>Describe the measures taken to minimize emissions:</td>
</tr>
<tr>
<td>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:</td>
</tr>
</tbody>
</table>

Form Completed by: ____________________________
Title / Position: ____________________________
Date: ____________________________
Phone: ____________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Giles Chemicals Premier Magnesia, LLC
Source Address: 200 Brown St, Greendale, Indiana 47025
FESOP Permit No.: F 029-40226-00049

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".

- NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
- THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

<table>
<thead>
<tr>
<th>Permit Requirement</th>
<th>Date of Deviation</th>
<th>Duration of Deviation</th>
<th>Number of Deviations</th>
<th>Probable Cause of Deviation</th>
<th>Response Steps Taken</th>
</tr>
</thead>
<tbody>
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</tbody>
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</table>
**Permit Requirement** (specify permit condition #)

<table>
<thead>
<tr>
<th>Date of Deviation:</th>
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<tr>
<th>Probable Cause of Deviation:</th>
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</table>

<table>
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<tr>
<th>Response Steps Taken:</th>
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</table>

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**Permit Requirement** (specify permit condition #)

<table>
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<tr>
<th>Date of Deviation:</th>
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<table>
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<tr>
<th>Probable Cause of Deviation:</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Response Steps Taken:</th>
</tr>
</thead>
</table>

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**Permit Requirement** (specify permit condition #)

<table>
<thead>
<tr>
<th>Date of Deviation:</th>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Number of Deviations:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Probable Cause of Deviation:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Response Steps Taken:</th>
</tr>
</thead>
</table>

---

Form Completed by: ________________________________

Title / Position: ________________________________

Date: ________________________________

Phone: ________________________________
I, ____________________________, being duly sworn upon my oath, depose and say:

1. I live in ____________________________ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of ________________ for ____________________________.

3. By virtue of my position with ____________________________, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of ____________________________.

4. I hereby certify that Giles Chemicals Premier Magnesia, LLC 200 Brown St, Greendale, Indiana 47025, completed construction of the magnesium sulfate (Epsom Salt) manufacturing facility on ____________________________ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on ____________________________ and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F 029-40226-00049, Plant ID No. 029-00049 issued on ____________________________.

5. Permittee, please cross out the following statement if it does not apply: Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature ____________________________
Date ____________________________

STATE OF INDIANA)
)SS
COUNTY OF ____________________________

Subscribed and sworn to me, a notary public in and for ____________________________ County and State of Indiana on this ____________________________ day of ____________________________, 20____. My Commission expires: ____________________________.

Signature ____________________________ (typed or printed)

Name ____________________________
Source Description and Location

Source Name: Giles Chemicals Premier Magnesia LLC
Source Location: 200 Brown St, Greendale, Indiana, 47025
County: Dearborn
SIC Code: 2819 (Industrial Inorganic Chemicals, Not Elsewhere Classified)
Operation Permit No.: F 029-40226-00049
Operation Permit Issuance Date: November 7, 2018
Significant Permit Revision No.: 029-43705-00049
Permit Reviewer: Aasim Noveer

Existing Approvals

The source was issued FESOP No. 029-40226-00049 on November 7, 2018. The source has since received the following approvals:
(a) Administrative Amendment No. 029-42484-00049, issued on February 28, 2020; and
(b) Administrative Amendment No. 029-42960-00049, issued on September 15, 2020.

County Attainment Status

The source is located in Dearborn County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO\textsubscript{2}</td>
<td>Cannot be classified.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O\textsubscript{3}</td>
<td>Attainment effective April 7, 2017, for the 2008 8-hour ozone standard for Lawrenceburg Township. Unclassifiable or attainment effective August 3, 2018, for the 2015 8-hour ozone standard.</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO\textsubscript{2}</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO\textsubscript{2} standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

(a) **Ozone Standards**
Volatile organic compounds (VOC) and Nitrogen Oxides (NO\textsubscript{x}) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO\textsubscript{x} emissions are considered when evaluating the rule applicability relating to ozone. Dearborn County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO\textsubscript{x} emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) **PM\textsubscript{2.5}**
Dearborn County has been classified as attainment for PM\textsubscript{2.5}. Therefore, direct PM\textsubscript{2.5}, SO\textsubscript{2}, and
NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Dearborn County has been classified as attainment or unclassifiable in Indiana for all the 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 source is classified as a chemical process plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

### Greenhouse Gas (GHG) Emissions

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 GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

### Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Revision (ton/year)</th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹,²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Including Fugitives*</td>
<td>82.89</td>
<td>48.07</td>
<td>47.93</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a “regulated air pollutant.”

²PM₂.₅ listed is direct PM₂.₅.

*Fugitive HAP emissions are always included in the source-wide emissions.
(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of one hundred (100) tons per year or more and it is 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 source of HAP, as defined in 40 CFR 63.2, because HAP 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.

(c) These emissions are based on the TSD of FESOP No. 029-40226-00049, issued on November 7, 2018.

### Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Giles Chemicals Premier Magnesia, LLC on February 1, 2021, relating to the addition of multiple units, increasing dryer and screener throughput.

The following is a list of the new and modified emission units and pollution control device(s):

**New Units:**

(a) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5,021 MMBtu per hour, using no control and exhausting outdoors.

(b) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

The following are activities that have no/ negligible emissions or emissions that are included with other units emissions calculation.

(c) One (1) centrifuge identified as CEN-2 with a maximum process rate of 10 tons per hour using no controls, permitted in 2021 and exhausting to indoors.

(d) Two (2) digesters, one primary and one secondary, identified as P-DIG 4 and S-DIG 4, permitted in 2021, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.

(e) One (1) cyclone identified as CY-1 added to Wet Scrubber WS-2, permitted in 2021, with a inlet flow on WS-2 is 24,000 ACFM.

(f) One (1) Filter press identified as FIL-2, filters wet product, generating wet mud, permitted in 2021, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting indoors.

**Modified units:**

(g) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, approved in 2021 for modification with a maximum capacity of 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.

(h) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, approved in 2021 for modification with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using a Impinjet Scrubber (WS-2) as control and exhausting outdoors.
Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit and operated rules.

Emission Calculations

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

Permit Level Determination – FESOP Significant Permit Revision

Pursuant to 326 IAC 2-1.1-1(12), 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."

The following table is used to determine the appropriate permit level under 326 IAC 2-8-11.1 (Permit Revisions). This table reflects the PTE before controls of the proposed revision. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$$^1$</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Single HAP$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler NGD-2</td>
<td>0.04</td>
<td>0.16</td>
<td>0.16</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Sparger (Truck Loading)</td>
<td>4.92</td>
<td>4.92</td>
<td>4.92</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total PTE Before Controls of the New Emission Units:</td>
<td>4.96</td>
<td>5.08</td>
<td>5.08</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04</td>
</tr>
</tbody>
</table>

$^1$PM$_{2.5}$ listed is direct PM$_{2.5}$.
$^2$Single highest HAP.
### PTE Increase of the Modified Emission Units (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM¹</th>
<th>PM₁₀</th>
<th>PM₂.₅¹</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dryer DRY-1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PTE Before Modifications</td>
<td>9548.40</td>
<td>8593.56</td>
<td>8593.56</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PTE After Modifications</td>
<td>11990.00</td>
<td>10791.00</td>
<td>10791.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>PTE Increase DRY-1</strong></td>
<td><strong>2441.60</strong></td>
<td><strong>2197.44</strong></td>
<td><strong>2197.44</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

| **Screener SCR-1** |     |      |        |     |     |     |    |            |
| PTE Before Modifications | 5.26 | 5.26 | 5.26 | -   | -   | -   | -   |            |
| PTE After Modifications | 8.78 | 8.78 | 8.78 | -   | -   | -   | -   |            |
| **PTE Increase SCR-1** | **3.52** | **3.52** | **3.52** | -   | -   | -   | -   |            |
| **Total PTE Increase of the Modified Emission Unit(s)/Process** | **2445.12** | **2200.96** | **2200.96** | -   | -   | -   | -   |            |

¹PM₂.₅ listed is direct PM₂.₅.

### PTE Increases Due to the Revision (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>PM₁₀</th>
<th>PM₂.₅¹</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Single HAP²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE Before Controls of the New Emission Units</td>
<td>4.96</td>
<td>5.08</td>
<td>5.08</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04 Hexane</td>
</tr>
<tr>
<td>Total PTE Increase of the Modified Emission Unit(s)/Process</td>
<td>2445.12</td>
<td>2200.96</td>
<td>2200.96</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total PTE of the Revision</strong></td>
<td><strong>2450.08</strong></td>
<td><strong>2206.04</strong></td>
<td><strong>2206.04</strong></td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04 Hexane</td>
</tr>
</tbody>
</table>

¹PM₂.₅ listed is direct PM₂.₅.
²Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the proposed revision.

Pursuant to 326 IAC 2-8-11.1(f)(1)(E), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves a change in operation, where the potential to emit of any pollutant increases as indicated below with potential to emit equal to or greater than twenty-five (25) tons per year of the following pollutants:

(i) PM, PM₁₀, or direct PM₂.₅.
PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions After Issuance (ton/year)</th>
<th>PM¹</th>
<th>PM₁₀²</th>
<th>PM₂.₅¹, ²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total PTE of Entire Source Including Fugitives</strong>*</td>
<td>91.33</td>
<td>56.51</td>
<td>56.37</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Title V Major Source Thresholds</strong></td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>PSD Major Source Thresholds</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."
²PM₂.₅ listed is direct PM₂.₅.
*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed potential to emit of the entire source after issuance.

The source opted to take PM, PM₁₀ and PM₂.₅ limit(s) in order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this source. See Technical Support Document (TSD) State Rule Applicability - Entire Source section, 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP), for more information regarding the limit(s).

(a) This existing Title V minor stationary source will continue to be minor under 326 IAC 2-7 because the potential to emit regulated air pollutants and HAPs from the entire source will continue to be less than or limited to less than the Title V major source threshold levels. Therefore, the source is subject to the provisions of 326 IAC 2-8 (FESOP) and is an area source under Section 112 of the Clean Air Act (CAA).

(b) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the potential to emit of all PSD regulated pollutants from the entire source will continue to be less than or limited to less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

Due to the proposed revision, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc and 326 IAC 12, are not included in the permit for one (1) NG boiler, identified as NGD-2, because it has the maximum design heat input capacity less than 10 MMBtu/hr (2.9 MW).

(b) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included for this proposed revision.
National Emission Standards for Hazardous Air Pollutants (NESHAP):

(c) The requirements of the National Emission Standards for Hazardous Air Pollutant (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ (326 IAC 20), are not included in the permit for the natural gas-fired boiler, identified as NGD-2. Pursuant to 40 CFR 63.11195(e), this subpart exempts gas-fired boilers.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources, 40 CFR 63, Subpart VVVVVV are not included in the permit for this source, since the source does not process, produce, or use any of the HAPs listed in Table 1 to this subpart in concentrations greater than 0.1 percent for the listed carcinogens or greater than 1.0 percent for the listed noncarcinogens.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources: Chemical Preparations Industry, 40 CFR 63, Subpart BBBBBBBB and are not included in the permit for this source, since the source does not have any chemical process operations in target HAP service. Target HAP as defined in 40 CFR 63.11588(4) means metal compounds for chromium, lead, manganese, and nickel. A material is target HAP-containing if it has raw materials, intermediate, or products that contain one or more target HAP. Any material that contains compounds of chromium (VI), lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or manganese or chromium (III) compounds in amounts greater than or equal to 1.0 percent by weight (as the metal) is considered to be target HAP-containing.

(f) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed revision.

Compliance Assurance Monitoring (CAM):

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability - Entire Source

Due to this revision, state rule applicability has been reviewed as follows:

326 IAC 1-7 (Stack Height)
This source has potential particulate matter emissions greater than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC 1-7-1(1), this source is subject to the requirements of 326 IAC 1-7. Additionally, pursuant to 326 IAC 1-7-3 (Actual stack height provisions), all exhaust gas stacks shall be constructed using good engineering practices (GEP), as outlined in the rule.

326 IAC 2-2 (PSD)
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP Revision section of this document.

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

(a) The PM emission from the dryer DRY-1, shall not exceed 13.0 pounds per hour.

Compliance with this limit, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than one-hundred (100) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The new and modified emission unit(s) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, Clark, or Floyd County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 2-8-4 (FESOP) and 326 IAC 20 (Hazardous Air Pollutants)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP Revision section of this document.

FESOP and PSD PM10 and PM2.5 Limits:
In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) The PM10 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.
(b) The PM2.5 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4:

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
The source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source (located in Dearborn County) is located in one of the counties listed in 326 IAC 6.5, but is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. The source-wide PTE of PM is 10 tons per year or more. Therefore, this source is subject to the requirements of 326 IAC 6.5-1-2 because the source-wide actual emissions of PM can be 10 tons per year or more.
326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Dearborn County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the facility because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

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**State Rule Applicability – Individual Facilities**

Due to the proposed revision, state rule applicability has been reviewed as follows:

**Boiler NGD-2:**

326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)
The source is not subject to 326 IAC 6-2, because pursuant to 326 IAC 6-2-1(e) if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6.5 and 326 IAC 6.8, then the limitations contained in 326 IAC 6.5 and 326 IAC 6.8 prevail. This source is subject to the requirements of 326 IAC 6.5 which are more stringent than 6-2. Therefore, the requirements of 326 IAC 6-2 are not applicable to boiler, identified as NGD-2.

326 IAC 6.5 (PM Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2(b)(3), particulate matter (PM) emissions from the boiler, identified as NGD-2, shall not exceed 0.01 grain per dry standard cubic foot (dscf) while combusting natural gas.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
One (1) NG boiler, identified as NGD-2 is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the boiler, identified as NGD-2 was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the one (1) NG boiler, identified as NGD-2, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

**Dryer DRY-1, Screener SCR-1 and Sparger:**

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), 326 IAC 6-3-2 does not apply to the dryer DRY-1, screener SCR-1 and Sparger because they are subject to particulate emission limitation under 326 IAC 6.5, which is more stringent than the Particulate emissions required under 326 IAC 6-3-2.

326 IAC 6.5 (PM Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from dryer DRY-1, screener SCR-1 and Sparger shall not exceed three-hundredths (0.03) grains per dry standard cubic feet (dscf).
Compliance Determination and Monitoring Requirements

(a) The Compliance Determination Requirements applicable to this revision are as follows:

**Testing Requirements:**

IDEM OAQ has determined that testing of the Dryer DRY-1, Screener SCR-1 are not required at this time to determine compliance with the PM10 and PM2.5 emission limits. IDEM has the authority to require testing at a later time if necessary to demonstrate compliance with any applicable requirement.

(b) The Compliance Monitoring Requirements applicable to this proposed revision are as follows:

<table>
<thead>
<tr>
<th>Control Device Emission Unit</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bag Filter (BF-2) for Sparger</td>
<td>Visible emission notations</td>
<td>Daily</td>
<td>Verify whether emissions are normal or abnormal</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the bag Filter (BF-2) for the Sparger must operate properly to assure compliance with 326 IAC 6.5-1-2.

Proposed Changes

The following changes listed below are due to the proposed revision. Deleted language appears as strikethrough text and new language appears as bold text:

**Change 1:** IDEM QAQ has separated the emission units into regulated insignificant activities and insignificant activities. OAQ added new emission units and updated the description of modified emission units as requested by the Permittee. OAQ also updated the general source phone number. Therefore the Section A of permit was updated as follows:

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

The Permittee owns and operates a stationary magnesium sulfate (Epsom Salt) manufacturing facility.

Source Address: 200 Brown St, Greendale, Indiana 47025

General Source Phone Number: (812) 537-4832 4852

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

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

(a) Two (2) silos, identified as SILO-1 and SILO-2 for storing magnesium oxide, constructed in 2018, with a maximum storage capacity of 150 tons each, using a Flex-Kleen bag filter (BF-1) as control, and exhausting to outdoors.

(b) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, **approved in 2021 for modification** with a maximum capacity of 20,000 pounds per hour 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.

(d) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, **approved in 2021 for modification** with a maximum screening capacity of 40 16.7 tons per hour, enclosed with a metal shell, using a Impinjet Scrubber (WS-2) as control and exhausting outdoors.

(d) Three (3) packaging lines as follows:
(i) Two (2) super sacks packaging lines that dump into sacks, identified as SACK-1 and SACK-2, constructed in 2018, with a maximum capacity of 17 tons per hour, using an Impinjet Scrubber (WS-2) as control, each, connected to its own bagger hopper.

(ii) One (1) bagger packaging line, identified as BG-1, constructed in 2018, with a maximum throughput capacity of 8.5 tons per hour (50 pounds per bag), connected to its own bagger hopper and using no controls.

Note: The Bagger Hopper and Sack(s) Hopper(s) tops are each enclosed with a lid.

(ae) One (1) surge bag hopper, identified as BGHOP-1, constructed in 2018, to receive the salt when there is a jam or short stoppage at the bagger, and has the maximum holding capacity of 8.5 tons per hour, using an Impinjet Scrubber (WS-2) as control, and exhausting outdoors.

(f) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

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

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

(c) One (1) boiler, identified as NGD-1, constructed in 2018, with a maximum heat input capacity of 5.021 MMBtu per hour, combusting natural gas, and exhausting outdoors.

(b) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(l)]

This source also includes the following insignificant activities:

(ea) Two (2) sulfuric acid storage tanks, identified as SULF-1 and SULF-2, constructed in 2018, with maximum storage capacity of 32,000 gallons each, using no controls and exhausting to indoors.

(gb) Two (2) primary digesters, identified as P-GID-1 and P-DIG-2, constructed in 2018, with a maximum capacity of 8,460 gallons each and maximum rating of 10 tons per hour, using no controls and steam exhausting outdoors.

(bc) Two (2) secondary digesters, identified as S-GID-1 and S-DIG-2, constructed in 2018, with a maximum capacity of 5,922 gallons each and maximum rating of 10 tons per hour, using no controls and steam exhausting outdoors.

(id) Two (2) digesters, one primary and one secondary, identified as P-DIG 3 and S-DIG 3, permitted in 2020, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.

(je) One (1) filter press, identified as FIL-1, constructed in 2018, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting to indoors.

(kf) One (1) centrifuge, identified as CEN-1, constructed in 2018, with a maximum process rate of 10 tons per hour, using no controls and exhausting to indoors.

(ig) One (1) recycling tank to recycle unsaleable salt, identified as RT-1, constructed in 2018, with a maximum capacity of 4,706 gallons, using no controls and exhausting to indoors.

(h) One (1) centrifuge identified as CEN-2 with a maximum process rate of 10 tons per hour using no controls, permitted in 2021 and exhausting to indoors.
Two (2) digesters, one primary and one secondary, identified as P-DIG 4 and S-DIG 4, permitted in 2021, with a maximum capacity of 15,500 gallons and 6450 gallons respectively, with a maximum rating of 10 tons per hour each, using no controls and steam exhausting outdoors.

One (1) cyclone identified as CY-1 added to Wet Scrubber WS-2, permitted in 2021, with an inlet flow on WS-2 is 24,000 ACFM.

One (1) Filter press identified as FIL-2, filters wet product, generating wet mud, permitted in 2021, with a maximum process rate of 20,000 pounds per hour, using no controls and exhausting indoors.

---

**Change 2:** IDEM, OAQ has removed the Condition C.6 as this source does not need a fugitive dust plan and renumbered the conditions in C. Section, therefore the permit was updated as follows:

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

**Change 3:** IDEM OAQ has added the new Sparger at the request of the Permittee and updated the unit description box in Section D.1. QAQ has updated the relevant Conditions D.1.1, D.1.3, D.1.5 and D.1.6, the monitoring conditions are also updated for Sparger to assure compliance with 326 IAC 6.5-1-2, therefore the permit was updated as follows:

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

<table>
<thead>
<tr>
<th>Emissions Unit Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) ****</td>
</tr>
<tr>
<td>(dc) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, with a maximum screening capacity of 10.16.7 tons per hour, enclosed with a metal shell, using a Impinjet Scrubber (WS-2) as control and exhausting outdoors.</td>
</tr>
<tr>
<td>(fd) ****</td>
</tr>
<tr>
<td>(me)</td>
</tr>
</tbody>
</table>
(f) One (1) sparger in truck loading line for conveying dried product to trucks for bulk shipments, approved in 2021 for construction, with a maximum throughput of 3,500 tons per year, controlled by bag filter identified as BF-2 and exhausting to stack.

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

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

D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from the two (2) silos, magnesium sulfate screener, two (2) super sacks, bagger, and the bag hopper and Sparger, shall not exceed 0.03 grains per dry standard cubic feet (dscf), each.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.3 Particulate Control

(a) In order to assure compliance with Condition D.1.1, the Flex-Kleen Bag Filter (BF-1) and the bag filter (BF-2) for particulate control shall be in operation and control emissions from the two (2) silos and Sparger at all times the two (2) silos and Sparger are in operation.

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

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the two (2) silos and sparger stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

D.1.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the two (2) silos and sparger stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

Change 4: IDEM, QAQ has updated the unit description box in Section D.2, separated the PSD limits from the FESOP limits for PM_{10}, PM_{2.5} as Conditions D.2.2, as they are required and renumbered the Conditions. Therefore the permit was updated as follows:

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, approved in 2021 for modification with a maximum capacity of 20,000 pounds per hour 110,000 tons per year (25,114 pounds per hour), using a Wet Scrubber (WS-1) as control, and exhausting outdoors.
Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PSD PM Minor Limit [326 IAC 2-2] [326 IAC 8-4]
In order to render the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2- and 326 IAC 2-7 not applicable, the Permittee shall comply with the following:

(a) the PM emission from the dryer DRY-1, shall not exceed 13.0 pounds per hour.

(b) the PM10 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

(c) the PM2.5 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

Compliance with these limits, combined with the potential to emit PM, PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM, PM10 and PM2.5 to less than 100 tons per 12 consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) not applicable.

D.2.2 FESOP and PSD PM10 and PM2.5 Limits [326 IAC 2-2] [326 IAC 2-8-4]
In order to render the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2- and 326 IAC 2-7 not applicable, the Permittee shall comply with the following:

(a) The PM10 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

(b) The PM2.5 emission from the dryer DRY-1, shall not exceed 5.7 pounds per hour.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than one-hundred (100) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.23

D.2.34

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.45 Particulate Control
In order to assure compliance with Conditions, D.2.1, and D.2.2 and D.2.3 the wet scrubber WS-1 used to control particulate emissions from the dryer (DRY-1) shall be in operation and control emissions from the dryer (DRY-1) at all times the dryer (DRY-1) is in operation.

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

D.2.56 Scrubber Flow Rate [326 IAC 2-2]
(a)
(b) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.2.1, and D.2.2 and D.2.3.

*****

D.2.67

*****

D.2.78

*****

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

D.2.89 Record Keeping Requirements

(a) *****

(b) To document the compliance status with Condition D.2.78 - Visible Emissions Notations, the Permittee shall maintain records of daily visible emission notations of the Wet Scrubber (WS-) 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).

*****

Change 5: IDEM QAQ has added boiler NGD-2 in the description box in Section D.3, and updated the Condition D.3.1, the permit was updated as follows:

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Specifcally regulated Insignificant Activities:

(a) One (1) boiler, identified as NGD-1, constructed in 2018, with a maximum heat input capacity of 5.021 MMBtu per hour, combusting natural gas, and exhausting outdoors.

(b) One (1) NG boiler, identified as NGD-2, approved in 2021 for construction, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control and exhausting outdoors.

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

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

D.3.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(b)(3), particulate emissions from the boiler NGD-1 and NGD-2 shall not exceed 0.01 grains per dry standard cubic feet (dscf) of natural gas burned.

*****

Additional Changes

IDEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

Change 6: Section B - Annual Fee Payment of the permit has been revised as follows to include an
updated phone number for the OAQ, Billing, Licensing, and Training Section:

*****

B.24 Annual Fee Payment [326 IAC 2-1.1-7]

*****

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-42308590 (ask for OAQ, Billing, Licensing, and Training Section) to determine the appropriate permit fee.

*****

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on February 1, 2021. Additional information was received on February 17, 2021.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 029-43705-00049. The staff recommends to the Commissioner that the FESOP Significant Permit Revision be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Aasim Noveer, 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) 234-1243 or (800) 451-6027, and ask for Aasim Noveer or (317) 234-1243.

(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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/2358.htm; and the Citizens’ Guide to IDEM on the Internet at: https://www.in.gov/idem/6900.htm.
## Appendix A: Emissions Calculations

### Emissions Summary

**Company Name:** Giles Chemicals Premier Magnesia LLC  
**Source Address:** 200 Brown St, Greendale, IN, 47025  
**Permit No:** F 029-40226-00049  
**Significant Permit Revision No:** 029-43705-00049  
**Reviewer:** Aasim Noveer  
**Date:** 02/11/21

### Table: Emission Units

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_2)</th>
<th>NO(_x)</th>
<th>VOC</th>
<th>CO</th>
<th>HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILO 1 &amp; 2</td>
<td>6.21</td>
<td>4.00</td>
<td>4.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dryer DRY-1</td>
<td>11990</td>
<td>10791</td>
<td>10791</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NG Boiler NGD-1</td>
<td>0.04</td>
<td>0.16</td>
<td>0.16</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
<tr>
<td>Screener SCR-1</td>
<td>8.78</td>
<td>8.78</td>
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<tr>
<td>aDigester DIG 1,2,3 &amp; 4</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>bCentrifuge CEN-1 &amp; CEN-2</td>
<td>-</td>
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<td>-</td>
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<tr>
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<td>6.75</td>
<td>6.75</td>
<td>-</td>
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<tr>
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<tr>
<td>Sparger (Truck Loading)</td>
<td>4.92</td>
<td>4.92</td>
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<tr>
<td>Unpaved Roads</td>
<td>0.04</td>
<td>0.01</td>
<td>0.001</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Paved Roads</td>
<td>0.91</td>
<td>0.18</td>
<td>0.04</td>
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<td><strong>Total</strong></td>
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### Table: Emission Units (LIMITED PTE)

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_2)</th>
<th>NO(_x)</th>
<th>VOC</th>
<th>CO</th>
<th>HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILO 1 &amp; 2</td>
<td>6.21</td>
<td>4.00</td>
<td>4.00</td>
<td>-</td>
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<td>Dryer DRY-1</td>
<td>56.94</td>
<td>25.0</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>NG Boiler NGD-1</td>
<td>0.04</td>
<td>0.16</td>
<td>0.16</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
<tr>
<td>Screener SCR-1</td>
<td>8.78</td>
<td>8.78</td>
<td>8.78</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>aDigester DIG 1,2,3 &amp; 4</td>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>bCentrifuge CEN-1 &amp; CEN-2</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Unpaved Roads</td>
<td>0.04</td>
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<td>0.001</td>
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<tr>
<td>Paved Roads</td>
<td>0.91</td>
<td>0.18</td>
<td>0.04</td>
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<tr>
<td><strong>Total</strong></td>
<td>91.33</td>
<td>56.51</td>
<td>56.37</td>
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<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
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</table>

### Table: Emission Units (Controlled PTE)

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_2)</th>
<th>NO(_x)</th>
<th>VOC</th>
<th>CO</th>
<th>HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILO 1 &amp; 2</td>
<td>0.06</td>
<td>0.04</td>
<td>0.04</td>
<td>-</td>
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<tr>
<td>Dryer DRY-1</td>
<td>15.40</td>
<td>13.86</td>
<td>13.86</td>
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<td>0.04</td>
<td>0.16</td>
<td>0.16</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
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<td>0.04</td>
</tr>
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<td>0.09</td>
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<td>0.09</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>bCentrifuge CEN-1 &amp; CEN-2</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
</tr>
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<td>Sparger (Truck Loading)</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
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<tr>
<td>Unpaved Roads</td>
<td>0.04</td>
<td>0.01</td>
<td>0.001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paved Roads</td>
<td>0.91</td>
<td>0.18</td>
<td>0.04</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>23.54</td>
<td>21.34</td>
<td>21.19</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>5.43</td>
<td>0.04</td>
</tr>
</tbody>
</table>

### Notes:

1. The primary and secondary digestion is an exothermic reaction and therefore produces only steam and no emissions, that will be vented outside without a need for a control device.
2. Centrifuged are inclosed, they take a wet slurry and separate liquid stream from wet cake.
## Appendix A: Emissions Calculations
### Modification Emission Summary

**Company Name:** Giles Chemicals Premier Magnesia LLC  
**Source Address:** 200 Brown St, Greendale, IN, 47025  
**Permit No.:** F 029-40226-00049  
**Significant Permit Revision No.:** 029-43705-00049  
**Reviewer:** Aasim Noveer  
**Date:** 2/11/2021

<table>
<thead>
<tr>
<th>Unit/Process</th>
<th>PM</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Single Worst HAP</th>
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</thead>
<tbody>
<tr>
<td><strong>Modified Emission Units (Uncontrolled/ Unlimited)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td>PTE Before Modifications</td>
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</tr>
<tr>
<td>Screener SCR-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PTE Before Modifications</td>
<td>5.26</td>
<td>5.26</td>
<td>5.26</td>
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<td>8.78</td>
<td>8.78</td>
<td>8.78</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Total PTE Increase of the Modified Emission Units/ Process</td>
<td>2445.12</td>
<td>2200.96</td>
<td>2200.96</td>
<td>-</td>
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<td>-</td>
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<tr>
<td><strong>New Emission Units (Uncontrolled/ Unlimited)</strong></td>
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<td></td>
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<tr>
<td>Boiler NGD-2</td>
<td>0.04</td>
<td>0.16</td>
<td>0.16</td>
<td>0.01</td>
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<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04 Hexane</td>
</tr>
<tr>
<td>Sparger (Truck Loading)</td>
<td>4.92</td>
<td>4.92</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total PTE for New Units</td>
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<td>5.08</td>
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<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04 Hexane</td>
</tr>
<tr>
<td><strong>Modified &amp; New Units (Uncontrolled/ Unlimited)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PTE Increase of Modified &amp; New Units</td>
<td>2450.08</td>
<td>2206.04</td>
<td>2206.04</td>
<td>0.01</td>
<td>2.16</td>
<td>0.12</td>
<td>1.81</td>
<td>0.04</td>
<td>0.04 Hexane</td>
</tr>
</tbody>
</table>
## Appendix A: Emissions Calculations

### Natural Gas Combustion Only

**MM BTU/HR <100**

### Company Name:
Giles Chemicals Premier Magnesia LLC

### Source Address:
200 Brown St, Greendale, IN, 47025

### Permit No:
F 029-40226-00049

### Significant Permit Revision No:
029-43705-00049

### Reviewer:
Aasim Noveer

### Date:
2/11/2021

### Heat Input Capacity

<table>
<thead>
<tr>
<th>Heat Input Capacity</th>
<th>HHV</th>
<th>Potential Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMBtu/hr</td>
<td>mmBtu</td>
<td>MMCF/yr</td>
</tr>
<tr>
<td>5.0</td>
<td>1020</td>
<td>43.1</td>
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</table>

### Pollutant Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.04</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.16</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.16</td>
</tr>
<tr>
<td>SO2</td>
<td>0.6</td>
<td>0.01</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>2.16</td>
</tr>
<tr>
<td>VOC</td>
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<td>0.12</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>1.81</td>
</tr>
</tbody>
</table>

*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.

**HMBtu = 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

### Hazardous Air Pollutants (HAPs)

#### HAPs - Organics

<table>
<thead>
<tr>
<th>HAPs - Organics</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMcf</td>
<td>2.1E-03</td>
<td>1.2E-03</td>
<td>7.5E-02</td>
<td>1.8E+00</td>
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</tr>
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<td>Potential Emission in tons/yr</td>
<td>4.5E-05</td>
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<td>7.3E-05</td>
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</tbody>
</table>

#### HAPs - Metals

<table>
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<tr>
<th>HAPs - Metals</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
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</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMcf</td>
<td>5.0E-04</td>
<td>1.1E-03</td>
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</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>1.1E-05</td>
<td>2.4E-05</td>
<td>3.0E-05</td>
<td>8.2E-06</td>
<td>4.5E-05</td>
<td>1.2E-04</td>
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</table>

**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.
### Emission Factors

<table>
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<tr>
<th>Source ID</th>
<th>Throughput (tons/year)</th>
<th>Enclosure *Control Efficiency</th>
<th>Throughput (tons/hour)</th>
<th>PM/PM10/PM2.5 (lb/ton)</th>
<th>PM/PM10/PM2.5 (tons/hr)</th>
<th>PM/PM10/PM2.5 (tons/yr)</th>
<th>PM/PM10/PM2.5 (tons/hr)</th>
<th>PM/PM10/PM2.5 (tons/yr)</th>
</tr>
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<tbody>
<tr>
<td>SACK 1</td>
<td>75000</td>
<td>50%</td>
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<td>1.54</td>
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<td>0.77</td>
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<tr>
<td>Bagger BG-1</td>
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<td>50%</td>
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<td>0.18</td>
<td>1.54</td>
<td>6.75</td>
<td>0.77</td>
<td>3.38</td>
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<tr>
<td>Bag Hopper BGHOP-1</td>
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<td>50%</td>
<td>8.56</td>
<td>0.18</td>
<td>1.54</td>
<td>6.75</td>
<td>0.77</td>
<td>3.38</td>
</tr>
</tbody>
</table>

#### Methodology

PM/PM10/PM2.5 Emission factors from SSC 3-05-016-07, Lime manufacturing process, raw material transfer and conveying.

Uncontrolled PM/PM10/PM2.5 emission (lbs/hr) = PM Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM/PM10/PM2.5 emission (tons/yr) = PM Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton

**Notes:**

1. The sack hopper and the bag hoppers are completely covered with a lid and the discharge pipe from operation is connected to the hole on the lid for these hoppers and therefore IDEM will allow 50% enclosure for these emission units. For this reason the enclosure control is considered as control device.

2. The facility plans to install 2 Sack and 1 bagger and 1 bagger at the site, there are 3 units exist at the facility-bagger hopper with bagger, Sack 1 hopper with Sack 1 and Sack 2 hopper with Sack 2. Please note only ONE of the three will be operating at any given time.
### Appendix A: Emissions Calculations

#### Storage Silos-1 & 2

**Company Name:** Giles Chemicals Premier Magnesia LLC  
**Source Address:** 200 Brown St, Greendale, IN, 47025  
**Permit No:** F 029-40226-00049  
**Significant Permit Revision No:** 029-43705-00049  
**Reviewer:** Aasim Noveer  
**Date:** 2/11/2021

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Description</th>
<th>Throughput (tons/yr)</th>
<th>Throughput (tons/hour)</th>
<th>PM (lb/ton)</th>
<th>PM10/PM2.5 (lb/ton)</th>
<th>PM (lbs/hr)</th>
<th>PM (tons/yr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
<th>PM10/PM2.5 (lbs/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILO-1 &amp; 2</td>
<td>MgO STORAGE SILOS</td>
<td>17000</td>
<td>1.94</td>
<td>0.73</td>
<td>0.47</td>
<td>1.42</td>
<td>6.21</td>
<td>0.91</td>
<td>4.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Methodology**

- AP-42 Section 11.12.2 uncontrolled emissions factor for pneumatic unloading of cement to a silo.
- The particulate emissions from the two Silos are controlled by a Bag Filter with a control efficiency equal to 99%.

**Uncontrolled PM emission (lbs/hr) = PM Emissions Factor (lbs/ton) * Throughput (tons/hr)**

**Uncontrolled PM emission (tons/yr) = PM Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton**

**Uncontrolled PM10/PM2.5 emission (lbs/hr) = PM10/PM2.5 Emissions Factor (lbs/ton) * Throughput (tons/hr)**

**Uncontrolled PM10/PM2.5 emission (tons/yr) = PM10/PM2.5 Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton**

**Controlled PM emissions (lbs/hr) = Uncontrolled PM emission (lbs/hr) * (1-0.99)**
## Appendix A: Emissions Calculations

### Dryer DRY-1

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Description</th>
<th>Throughput (tons/year)</th>
<th>Throughput (tons/hour)</th>
<th>Uncontrolled PM/PM10/PM2.5 (lb/ton)</th>
<th>Controlled PM/PM10/PM2.5 (lb/ton)</th>
<th>PM (lb/hr)</th>
<th>PM (tons/yr)</th>
<th>PM10/PM2.5 (lb/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
<th>PM10/PM2.5 (lb/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
<th>PM10/PM2.5 (lb/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
<th>Control efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRY-1</td>
<td>CARMEN FLUID BED DRYER AND COOLER (MODEL FBP-1594M)</td>
<td>110000</td>
<td>12.56</td>
<td>218</td>
<td>0.28</td>
<td>2737.44</td>
<td>11990.00</td>
<td>2463.70</td>
<td>10791.00</td>
<td>3.52</td>
<td>15.40</td>
<td>3.16</td>
<td>13.86</td>
<td>13.00</td>
</tr>
</tbody>
</table>

**Methodology**

The particulate emissions from the dryer (DRY-1) are controlled by a Wet Scrubber with a control efficiency equal to 99.8%.

AP-42 Chapter II.4, Table II.4-1 emissions factor uncontrolled for fluidized-bed dryers and controlled when equipped with Wet Scrubber

Uncontrolled PM emission (lbs/hr) = PM Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM emission (tons/yr) = PM Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton

Controlled PM10/PM2.5 emission (tons/yr) = (0.9%) of controlled PM emissions (tons/yr)

Control efficiency = 1 - (Uncontrolled PM10/PM2.5 emission (tons/yr) / Controlled PM10/PM2.5 emission (tons/yr))

**Note:**

VOCs are released only from a particular operation - Caprolactam byproduct plants - from Ammonium Sulfate. The process used to make Magnesium sulfate (Epsom Salt) does not contain any Caprolactam byproduct.
**Appendix A - Natural Gas Combustion Sources**

**Company Name:** Giles Chemicals Premier Magnesia LLC  
**Source Address:** 200 Brown St, Greendale, IN, 47025  
**Permit No:** F 029-40226-00049  
**Significant Permit Revision No:** 029-43705-00049  
**Reviewer:** Aasim Noveer  
**Date:** 2/11/21

### HHV

<table>
<thead>
<tr>
<th>Heat Input Capacity (MMBtu/hr)</th>
<th>Mmscf</th>
<th>MMCF/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.02</td>
<td>1020</td>
<td>43.12</td>
</tr>
</tbody>
</table>

#### Pollutant Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMcF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>1.9</td>
<td>0.04</td>
</tr>
<tr>
<td>PM10</td>
<td>7.6</td>
<td>0.16</td>
</tr>
<tr>
<td>direct PM2.5</td>
<td>7.6</td>
<td>0.16</td>
</tr>
<tr>
<td>SO2</td>
<td>0.6</td>
<td>1.29E-02</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>2.16</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.12</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>5.43</td>
</tr>
</tbody>
</table>

**Notes:**
- 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

#### Hazardous Air Pollutants (HAPs)

**HAPs - Organics**

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>4.5E-05</td>
<td>2.6E-05</td>
<td>1.6E-03</td>
<td>3.9E-02</td>
<td>7.3E-05</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**HAPs - Metals**

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>5.0E-04</td>
<td>1.1E-03</td>
<td>1.4E-03</td>
<td>3.8E-04</td>
<td>2.1E-03</td>
<td>1.2E-04</td>
</tr>
</tbody>
</table>

**Methodology:**

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

Additional HAPs emission factors are available in AP-42, Chapter 1.4.
## Appendix A: Emissions Calculations
### Screener SCR-1

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Description</th>
<th>Capacity (tons/day)</th>
<th>Throughput (tons/hour)</th>
<th>Enclosure Efficiency</th>
<th>PM/PM10/PM2.5 (lb/ton)</th>
<th>PM/PM10/PM2.5 (tons/yr)</th>
<th>PM/PM10/PM2.5 (lbs/hr)</th>
<th>PM/PM10/PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR-1</td>
<td>Screener</td>
<td>400.8</td>
<td>16.70</td>
<td>99%</td>
<td>0.12</td>
<td>2.00</td>
<td>8.78</td>
<td>0.02</td>
</tr>
</tbody>
</table>

**Methodology**

Uncontrolled emissions factor for Screening (SCC 3-05-025-11), construction Sand and Gravel

Uncontrolled PM emission (lbs/hr) = PM Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM emission (tons/yr) = Uncontrolled PM emission (lbs/hr) * 8760 hours per year / 2000 lbs per ton

Uncontrolled PM10/PM2.5 emission (lbs/hr) = PM10/PM2.5 Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM10/PM2.5 emission (tons/yr) = Uncontrolled PM10/PM2.5 emission (lbs/hr) * 8760 hours per year / 2000 lbs per ton

Loading = 16.70 ton/hr and 24 hrs/day = 400.8 ton/day
### Appendix A: Emissions Calculations

#### Sparger (Truck Loading)

**Company Name:** Giles Chemicals Premier Magnesia LLC  
**Source Address:** 200 Brown St, Greendale, IN, 47025  
**Permit No:** F 029-40226-00049  
**Significant Permit Revision No:** 029-43705-00049  
**Reviewer:** Aasim Noveer  
**Date:** 2/11/21

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Description</th>
<th>Throughput (tons/year)</th>
<th>Throughput (tons/hour)</th>
<th>PM (lb/ton)</th>
<th>PM10/PM2.5 (lb/ton)</th>
<th>PM (lbs/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
<th>PM (tons/hr)</th>
<th>PM10/PM2.5 (lbs/hr)</th>
<th>PM10/PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck load</td>
<td>Product transfer and conveying and loading</td>
<td>3500</td>
<td>0.40</td>
<td>2.81</td>
<td>2.81</td>
<td>1.12</td>
<td>4.92</td>
<td>1.12</td>
<td>4.92</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**Methodology**

EF = 2.2 pounds/ton product transfer + 0.61 pounds/ton truck loading, closed truck (AP-42, Table 11.17-4)  

AP-42: *Compilation of Air Emissions Factors | Air Emissions Factors and Quantification* | US EPA

The particulate emissions from the transfer and loading process will be controlled by fabric filter with an estimated efficiency of 95%  

Uncontrolled PM emission (lbs/hr) = PM Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM emission (tons/yr) = PM Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton

Uncontrolled PM10/PM2.5 emission (lbs/hr) = PM10/PM2.5 Emissions Factor (lbs/ton) * Throughput (tons/hr)

Uncontrolled PM10/PM2.5 emission (tons/yr) = PM10/PM2.5 Emissions Factor (lbs/ton) * Throughput (tons/yr) / 2000 lbs/ton

Controlled PM emissions (lbs/hr) = Uncontrolled PM emission (lbs/hr) * (1-0.95)
Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Giles Chemicals Premier Magnesia LLC
Source Address: 200 Brown St, Greendale, IN, 47025
Permit No: F 029-40226-00049
Significant Permit Revision No: 029-43705-00049
Reviewer: Aasim Noveer
Date: 2/11/2021

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)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>8.0</td>
<td>1.0</td>
<td>8.0</td>
<td>11.0</td>
<td>88.0</td>
<td>16</td>
<td>0.003</td>
<td>0.0</td>
<td>8.8</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>8.0</td>
<td>1.0</td>
<td>8.0</td>
<td>22.0</td>
<td>176.0</td>
<td>16</td>
<td>0.003</td>
<td>0.0</td>
<td>8.8</td>
</tr>
<tr>
<td>Totals</td>
<td>16.0</td>
<td>264.0</td>
<td>0.0</td>
<td>17.7</td>
<td>0.0</td>
<td>17.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Vehicle Weight Per Trip = \[
\frac{16.5}{264.0} \text{ tons/trip}
\]
Average Miles Per Trip = \[
\frac{0.00}{264.0} \text{ miles/trip}
\]

Unmitigated Emission Factor, \( Ef = k \cdot (s/12)^a \cdot (W/3)^b \) (Equation 1a from AP-42 13.2.2)

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum one-way distance (mi/trip)</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

\( 4.9 \) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)
\( 1.5 \) = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
\( 0.7 \) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)
\( 0.9 \) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)
\( 0.45 \) = average vehicle weight (provided by source)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, \( E_{ext} = E \cdot \frac{(365 - P)/365}{365} \) (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, \( E_{ext} = E \cdot \frac{(365 - P)/365}{365} \)

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

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum one-way miles (miles/yr)</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
</tr>
</tbody>
</table>

\( 4.27 \) = average vehicle weight (provided by source)

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM10 (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (Before Control) (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>0.02</td>
<td>0.005</td>
<td>0.0005</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.02</td>
<td>0.005</td>
<td>0.0005</td>
</tr>
<tr>
<td>Totals</td>
<td>0.04</td>
<td>0.010</td>
<td>0.0010</td>
</tr>
</tbody>
</table>

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/) = 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)]
- Mitigated PTE (Before Control) (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
- Mitigated PTE (After Control) (tons/yr) = (Mitigated PTE (Before Control) (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: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Giles Chemicals Premier Magnesia LLC
Source Address: 200 Brown St, Greendale, IN, 47025
Permit No: F 029-40226-00049
Significant Permit Revision No: 029-43705-00049
Reviewer: Aasim Noveer
Date: 2/11/2021

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)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles per day</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>8.0</td>
<td>1.0</td>
<td>8.0</td>
<td>11.0</td>
<td>88.0</td>
<td>82</td>
<td>0.016</td>
<td>0.1</td>
<td>45.3</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>8.0</td>
<td>1.0</td>
<td>8.0</td>
<td>22.0</td>
<td>176.0</td>
<td>82</td>
<td>0.016</td>
<td>0.1</td>
<td>45.3</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.894</td>
<td>1.9</td>
<td>691.3</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.894</td>
<td>1.9</td>
<td>691.3</td>
</tr>
<tr>
<td>Totals</td>
<td>18.0</td>
<td>266.0</td>
<td>4.0</td>
<td>1473.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Vehicle Weight Per Trip = 14.8 tons/trip
Average Miles Per Trip = 0.22 miles/trip

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

where \( k = 0.011 \) PM, 0.0022 PM10, 0.00054 PM2.5, \( sL = 9.7 \) g/m² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3
\( W = 14.8 \) tons = average vehicle weight (provided by source)
\( E_{ext} = E_f \cdot [1 - (p/4N)] \) (Equation 2 from AP-42 13.2.1)

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

Mitigated Emission Factor, \( E_{ext} \) = 1.356 PM, 0.271 PM10, 0.0666 PM2.5

Methodology

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM10 (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (Before Control) (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>0.03</td>
<td>0.01</td>
<td>0.001</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.03</td>
<td>0.01</td>
<td>0.001</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.03</td>
<td>0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.43</td>
<td>0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.43</td>
<td>0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Totals</td>
<td>0.91</td>
<td>0.18</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Abbreviations

- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- PM2.5 = Particle Matter (<2.5 um)
- PTE = Potential to Emit
- PTE (Before Control) (ton) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * [ton(2000 lbs)]
- PTE (After Control) (tons) = [Mitigated PTE (Before Control) (tons/yr)] * [1 - Dust Control Efficiency]
May 5, 2021

Bruce Dixon
Giles Chemicals Premier Magnesia LLC
200 Brown St
Greendale IN 47025

Re: Public Notice
Giles Chemicals Premier Magnesia LLC
Permit Level: 029-43705-00049
Permit Number: FESOP Significant Permit Rev
(Minor PSD/EO) (120)

Dear Bruce Dixon:

Enclosed is the Notice of 30-Day Period for Public Comment for your draft air permit.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person. The Notice of 30-Day Period for Public Comment has also been sent to the OAQ Permits Branch Interested Parties List and, if applicable, your Consultant/Agent and/or Responsible Official/Authorized Individual.

The preliminary findings, including the draft permit, technical support document, emission calculations, and other supporting documents, are available electronically at:

IDEM’s online searchable database: http://www.in.gov/apps/idem/caats/ Choose Search Option by Permit Number, then enter permit 43705

and

IDEM’s Virtual File Cabinet (VFC): https://www.IN.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/public-notices/

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Lawrenceburg Public Library, 150 Mary St, Lawrenceburg IN 47025. 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.

An Equal Opportunity Employer

Recycled Paper
Please review the draft permit 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 Aasim Noveer, 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 4-1243 or dial (317) 234-1243.

Sincerely,

L. Pogost

L. Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter access via website 8/10/2020
May 5, 2021

To: Lawrenceburg Public Library 150 Mary St Lawrenceburg IN 47025

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

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

Applicant Name: Giles Chemicals Premier Magnesia LLC
Permit Number: 029-43705-00049

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
- 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 Smiddle-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 updated 4/2019
Notice of Public Comment

May 5, 2021
Giles Chemicals Premier Magnesia LLC
029-43705-00049

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 posted on IDEM’s Public Notice website at https://www.in.gov/idem/public-notices/.

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 Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@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 Letter 2/28/2020
**Mail Code 61-53**

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<td>Bruce Dixon  Giles Chemicals Premier Magnesia LLC 200 Brown St Greendale IN 47025 (Source CAATS)</td>
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<td>Matt Haynes  Director Giles Chemicals Premier Magnesia LLC 75 Giles Place Waynesville NC 28786 (RO CAATS)</td>
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<td>Dearborn County Commissioner 215 B West High Street Lawrenceburg IN 47025 (Local Official)</td>
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<td>Martin M. Guss, Jr. 10400 Millstone Dr, P.O. Box 272 Aurora IN 47001 (Affected Party)</td>
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<td>Mrs. Shirley Greive 4412 E. Laughery Aurora IN 47001 (Affected Party)</td>
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<td>Mrs. Melanie Bushorn 4172 E. Laughery Creek Rd Aurora IN 47001 (Affected Party)</td>
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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 Domestic Mail Manual R900, S913, and S921 for limitations of coverage on insured and COD mail. See International Mail Manual for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.