

June 25, 2025

Indiana Department of Environmental Management  
Office of Air Quality / Air Permits Branch  
ATTN: Incoming Application  
100 North Senate Avenue MC 61-53  
Indianapolis, Indiana 46204

RE: Giles Chemical Premier Magnesia, LLC  
200 Brown Street  
Greendale, IN 47025  
Patriot Project No. 25-0073-09E  
FESOP Permit Number: 029-46296-00049

Dear Permit Writer:

Patriot Engineering and Environmental, Inc. (*Patriot*) was retained by Giles Chemical Premier Magnesia, LLC (Premier Magnesia) at 200 Brown Street in Greendale, IN., in Dearborn County, to provide environmental consulting assistance to prepare the attached permit modification request for Federal Enforceable State Operating Permit (FESOP) 029-46296-00049.

Premier Magnesia needs to add a cooling tower identified as Cooling Tower 2 as soon as possible, and has plans to add a Magnesium Sulfate Screener, identified as SCR-2 in the next year. We request your expedited review due to a production issue with product crystallization and the immediate need for the new cooling tower that only adds 0.01 tons per year of PM to the FESOP permit.

A copy of redline/strikeouts of Section A of the FESOP is also attached with this application to indicate several corrections that Premier Magnesia would like to make to better distinguish and accurately document emissions units and insignificant activities.

If you need additional information or have any questions, please contact Heather Locke, Senior Environmental Compliance Manager, *Patriot*, at (317) 576-8058 or [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com).

Sincerely,  
**Patriot Engineering and Environmental, Inc.**

*Heather Locke*

Heather Locke  
Senior Manager, Environmental Compliance  
Environmental Division

Enclosures



# AIR PERMIT APPLICATION COVER SHEET

State Form 50639 (R4 / 1-10)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch  
100 N. Senate Avenue, MC 61-53 Room 1003  
Indianapolis, IN 46204-2251  
Telephone: (317) 233-0178 or  
Toll Free: 1-800-451-6027 x30178 (within Indiana)  
Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

## NOTES:

- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for all air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
- Submit the completed air permit application packet, including all forms and attachments, to **IDEM Air Permits Administration** using the address in the upper right hand corner of this page.
- IDEM will send a bill to collect the filing fee and any other applicable fees.
- Detailed instructions for this form are available on the Air Permit Application Forms website.

1. Tax ID Number: XXXXXXXXXX

## FOR OFFICE USE ONLY

PERMIT NUMBER:

DATE APPLICATION WAS RECEIVED:

## PART A: Purpose of Application

Part A identifies the purpose of this air permit application. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

2. Source / Company Name: Giles Chemical Premier Magnesia LLC 3. Plant ID: 029 – 00049

4. Billing Address: 200 Brown Street

City: Greendale

State: IN

ZIP Code: 47025 –

5. Permit Level: ☐ Exemption ☐ Registration ☐ SSOA ☐ MSOP ☒ FESOP ☐ TVOP ☐ PBR

6. Application Summary: Check all that apply. Multiple permit numbers may be assigned as needed based on the choices selected below.

- |                                                    |                                                             |                                                            |
|----------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Initial Permit            | <input type="checkbox"/> Renewal of Operating Permit        | <input type="checkbox"/> Asphalt General Permit            |
| <input checked="" type="checkbox"/> Review Request | <input type="checkbox"/> Revocation of Operating Permit     | <input type="checkbox"/> Alternate Emission Factor Request |
| <input type="checkbox"/> Interim Approval          | <input type="checkbox"/> Relocation of Portable Source      | <input type="checkbox"/> Acid Deposition (Phase II)        |
| <input type="checkbox"/> Site Closure              | <input type="checkbox"/> Emission Reduction Credit Registry |                                                            |

☐ Transition (between permit levels)

From:

To:

- |                                                               |                                                                  |                                                                    |
|---------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Administrative Amendment: | <input type="checkbox"/> Company Name Change                     | <input checked="" type="checkbox"/> Change of Responsible Official |
|                                                               | <input type="checkbox"/> Correction to Non-Technical Information | <input type="checkbox"/> Notice Only Change                        |
|                                                               | <input type="checkbox"/> Other (specify):                        |                                                                    |

- |                                                   |                                                                         |                                                                          |                                                      |
|---------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------|
| <input checked="" type="checkbox"/> Modification: | <input checked="" type="checkbox"/> New Emission Unit or Control Device | <input type="checkbox"/> Modified Emission Unit or Control Device        |                                                      |
|                                                   | <input type="checkbox"/> New Applicable Permit Requirement              | <input type="checkbox"/> Change to Applicability of a Permit Requirement |                                                      |
|                                                   | <input type="checkbox"/> Prevention of Significant Deterioration        | <input type="checkbox"/> Emission Offset                                 | <input type="checkbox"/> MACT Preconstruction Review |
|                                                   | <input checked="" type="checkbox"/> Minor Source Modification           | <input type="checkbox"/> Significant Source Modification                 |                                                      |
|                                                   | <input type="checkbox"/> Minor Permit Modification                      | <input type="checkbox"/> Significant Permit Modification                 |                                                      |
|                                                   | <input type="checkbox"/> Other (specify):                               |                                                                          |                                                      |

7. Is this an application for an initial construction and/or operating permit for a "Greenfield" Source? ☐ Yes ☒ No

8. Is this an application for construction of a new emissions unit at an Existing Source? ☐ Yes ☒ No

### PART B: Pre-Application Meeting

Part B specifies whether a meeting was held or is being requested to discuss the permit application.

9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project?

☒ No ☐ Yes: Date:

10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project?

☒ No ☐ Yes: Proposed Date for Meeting:

### PART C: Confidential Business Information

Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file.

Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

11. Is any of the information contained within this application being claimed as **Confidential Business Information**?

☒ No ☐ Yes

### PART D: Certification Of Truth, Accuracy, and Completeness

Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit.

For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(34) must certify the air permit application. For all other applicants, this person is an "authorized Individual" as defined in 326 IAC 2-1.1-1(1).

☒ I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.

Andrew M Goolsby  
Name (typed)

Bulk Operations Manager  
Title

Signature

6-25-25  
Date



# **OAQ AIR PERMIT APPLICATION – FORMS CHECKLIST**

State Form 51607 (R5 / 1-10)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**IDEM – Office of Air Quality – Permits Branch**  
 100 N. Senate Avenue, MC 61-53 Room 1003  
 Indianapolis, IN 46204-2251  
 Telephone: (317) 233-0178 or  
 Toll Free: 1-800-451-6027 x30178 (within Indiana)  
 Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

## **NOTES:**

- The purpose of this checklist is to help the applicant and IDEM, OAQ ensure that the air permit application packet is administratively complete. This checklist is a required form.
- Check the appropriate box indicating whether each application form is applicable for the current permit application. The source must submit only those forms pertinent to the current permit application.
- Place this checklist between the cover sheet and all subsequent forms and attachments that encompass your air permit application packet.

### **Part A: General Source Data**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	COVER	Application Cover Sheet	50639	Include for every application, modification, and renewal, including source specific operating agreements (SSOA).
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	CHECKLIST	Forms Checklist	51607	Include for every application, modification, and renewal, including SSOA.
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	GSD-01	Basic Source Level Information	50640	Include for every application, modification, and renewal, including SSOA.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-02	Plant Layout Diagram	51605	Include for every new source application, and modification.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-03	Process Flow Diagram	51599	Include one for every process covered by the application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-04	Stack / Vent Information	51606	Include for every new source application, and modification.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-05	Emissions Unit Information	51610	Include for every process covered by the application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-06	Particulate Emissions Summary	51612	Include if the process has particulate emissions (PM).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-07	Criteria Pollutant Emissions Summary	51602	Include if the process has criteria pollutant emissions.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-08	HAP Emissions Summary	51604	Include if the process has hazardous air pollutant emissions (HAP).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-09	Summary of Additional Information	51611	Include if the additional information is included.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-10	Insignificant Activities	51596	Include if there are unpermitted insignificant activities.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-11	Alternative Operating Scenario	51601	Include if an AOS is requested.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-12	Affidavit of Nonapplicability	51600	Include if the standard notification requirements do not apply.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	GSD-13	Affidavit of Applicability	51603	Include if the standard notification requirements apply.
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	GSD-14	Owners and Occupants Notified	51609	Include if the standard notification requirements apply.
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	GSD-15	Government Officials Notified	51608	Include if the standard notification requirements apply.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	RENEWAL	Renewal Checklist	51755	Include with every operating permit renewal packet.



**Part B: Process Information**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	AEF-01	Alternate Emission Factor Request	51860	Submit if you are requesting to use an emission factor other than AP-42.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-01	Miscellaneous Processes	52534	Include one form for each process for which there is not a specific PI form.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02A	Combustion Unit Summary	52535	Include one form to summarize all combustion units ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02B	<i>Combustion:</i> Boilers, Process Heaters, & Furnaces	52536	Include one form for each boiler, process heater, or furnace ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02C	<i>Combustion:</i> Turbines & Internal Combustion Engines	52537	Include one form for each turbine or internal combustion engine ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02D	<i>Combustion:</i> Incinerators & Combustors	52538	Include one form for each incinerator or combustor ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02E	<i>Combustion:</i> Kilns	52539	Include one form for each kiln ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02F	<i>Combustion:</i> Fuel Use	52540	Include one form for each combustion unit ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02G	<i>Combustion:</i> Emission Factors	52541	Include one form for each combustion unit ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-02H	<i>Combustion:</i> Federal Rule Applicability	52542	Include one form for each combustion unit ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-03	Storage and Handling of Bulk Material	52543	Include if the process involves the storage and handling of bulk materials.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-04	Asphalt Plants	52544	Include for each asphalt plant process ( <i>unless general permit</i> ).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-05	Brick / Clay Products	52545	Include for each brick and/or clay products process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-06	Electroplating Operations	52546	Include for each electroplating process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-07	Welding Operations	52547	Include for each welding process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-08	Concrete Batchers	52548	Include for each concrete batcher ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-09	Degreasing	52549	Include for each degreasing process ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-10	Dry Cleaners	52550	Include for each dry cleaning process
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-11	Foundry Operations	52551	Include for each foundry process
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-12	Grain Elevators	52552	Include for each grain elevator ( <i>unless</i> SSOA).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-13	Lime Manufacturing	52553	Include for each lime manufacturing process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-14	Liquid Organic Compound Storage	52554 (doc)	Include if the process involves the storage of liquid organic compounds.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-14ALT	Alternate version of Liquid Organic Compound Storage	52555 (xls)	Include if the process involves the storage of liquid organic compounds and there are several storage vessels.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-15	Portland Cement Manufacturing	52556	Include for each Portland cement manufacturing process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-16	Reinforced Plastics & Composites	52557	Include for each reinforced plastics and composites process.

Continued on Next Page

**Part B: Process Information**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-17	Blasting Operations	52558	Include for each blasting process ( <i>unless SSOA</i> ).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-18	Mineral Processing	52559	Include if the process involves mineral processing ( <i>unless SSOA</i> ).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-19	Surface Coating & Printing Operations	52560	Include for each surface coating or printing process ( <i>unless SSOA</i> ).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-20	Woodworking / Plastic Machining	52561	Include for each woodworking or plastic machining process ( <i>unless SSOA</i> ).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-21	Site Remediation	52570	Include for each soil remediation process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PI-22	Ethanol Plants ( <i>Under Development</i> )	None	Include for each ethanol plant.

**Part C: Control Equipment**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-01	Control Equipment Summary	51904	Include if add-on control equipment will be used for the process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-02	Particulates – Baghouse / Fabric Filter	51953	Include for each baghouse or fabric filter.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-03	Particulates – Cyclone	52620	Include for each cyclone.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-04	Particulates – Electrostatic Precipitator	52621	Include for each electrostatic precipitator.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-05	Particulates – Wet Collector / Scrubber / Absorber	52622	Include for each wet collector, scrubber, or absorber.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-06	Organics – Flare / Oxidizer / Incinerator	52623	Include for each flare, oxidizer, or incinerator.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-07	Organics – Adsorbers	52624	Include for each adsorber.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-08	Organics – Condenser	52625	Include for each condenser.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-09	Reduction Technology	52626	Include for each control device using reduction technology (e.g., SCR, SNCR).
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CE-10	Miscellaneous Control Equipment	52436	Include one form for equipment for which there is not a specific CE form.

**Part D: Compliance Determination for Part 70 Sources**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CD-01	Emissions Unit Compliance Status	51861	Include for every Title V application, including modifications.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CD-02	Compliance Plan by Applicable Requirement	51862	Include for every Title V application, including modifications.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CD-03	Compliance Plan by Emissions Unit	51863	Include for every Title V application, including modifications.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	CD-04	Compliance Schedule and Certification	51864	Include for every Title V application, including modifications and renewal.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	FED-03	Compliance Assurance Monitoring	53377	Include for every Title V application, including modifications.

**Part E: Best Available Control Technology**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	BACT-01	Analysis of Best Available Control Technology	None	Include for every BACT application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	BACT-01a	Background Search: Existing BACT Determinations	None	Include for every BACT application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	BACT-01b	Cost/Economic Impact Analysis	None	Include for every BACT application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	BACT-02	Summary of Best Available Control Technology	None	Include for every BACT application.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PSD / EO-01	PSD / Emission Offset Checklist	None	Include for every PSD application and every NSR application that requires emission offsets.

**Part F: Emission Credit Registry**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	EC-01	Generation of Emission Credits	51783	Include if the modification results in emission reductions.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	EC-02	Transfer of Emission Credits	51784	Submit whenever registered emission credits are transferred.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	EC-03	Use of Emission Credits	51785	Include if the modification requires the use of emission credits for offsets.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	EC-04	Emission Credit Request	51906	Submit if you are looking for emission credits for offsets.

**Part G: Plantwide Applicability Limits**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PAL-01	Actuals Plantwide Applicability Limit	52451	Include if the modification results in emission reductions.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PAL-02	Revised Plantwide Applicability Limit	52452	Submit whenever registered emission credits are transferred.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PAL-03	Plantwide Applicability Limit Renewal	52453	Include if the modification requires the use of emission credits for offsets.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	PAL-04	Request for Termination of Plantwide Applicability Limit	52454	Submit if you are looking for emission credits for offsets.

**Part H: Air Toxics**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	FED-01	Summary of Federal Requirements – NSPS & NESHAP	53512	Include for each 40 CFR Part 60 NSPS, 40 CFR Part 61 NESHAP, and 40 CFR Part 63 NESHAP applicable to the process.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	FED-02	MACT Pre-Construction Review	51905	Include if constructing or modifying a process subject to a Part 63 NESHAP.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Form ID	MACT Initial Notification	None	This form is available on the U.S. EPA website. Completed notifications should be submitted to the IDEM Compliance Branch.

**Part I: Special Permits**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	INTERIM	Interim Approval	None	Submit if you are applying for interim operating approval.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	ASPHALT	Asphalt General Permit	None	Submit if you are applying for or modifying an asphalt plant general permit.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	NOXBTP	NOx Budget Permit	None	Submit if you are a power plant or if you have opted in to the NOx budget trading program.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	ACIDRAIN	Phase 2 Acid Rain Permit	None	Submit if you are applying for, modifying, or renewing a Phase 2 Acid Rain permit.



**Part J: Source Specific Operating Agreements (SSOA)**

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-01	Summary of Application and Existing Agreements	53438	Submit if you are applying for or modifying a Source Specific Operating Agreement.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-02	Industrial / Commercial Surface Coating Operations -OR- Graphic Arts Operations (326 IAC 2-9-2.5)	53439	Submit if you are applying for or modifying a SSOA for industrial or commercial surface coating operations not subject to 326 IAC 8-2; or graphic arts operations not subject to 326 IAC 8-5-5.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-03	Surface Coating or Graphic Arts Operations (326 IAC 2-9-3)	53440	Submit if you are applying for or modifying a SSOA for surface coating or graphic arts operations.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-04	Woodworking Operations (326 IAC 2-9-4)	53441	Submit if you are applying for or modifying a SSOA for woodworking operations.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-05	Abrasive Cleaning Operations (326 IAC 2-9-5)	53442	Submit if you are applying for or modifying a SSOA for abrasive cleaning operations.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-06	Grain Elevators (326 IAC 2-9-6)	53443	Submit if you are applying for or modifying a SSOA for grain elevators.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-07	Sand And Gravel Plants (326 IAC 2-9-7)	53444	Submit if you are applying for or modifying a SSOA for sand and gravel plants.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-08	Crushed Stone Processing Plants (326 IAC 2-9-8)	53445	Submit if you are applying for or modifying a SSOA for crushed stone processing plants.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-09	Ready-Mix Concrete Batch Plants (326 IAC 2-9-9)	53446	Submit if you are applying for or modifying a SSOA for ready-mix concrete batch plants.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-10	Coal Mines And Coal Preparation Plants (326 IAC 2-9-10)	53447	Submit if you are applying for or modifying a SSOA for coal mines and coal preparation plants.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-11	Automobile Refinishing Operations (326 IAC 2-9-11)	53448	Submit if you are applying for or modifying a SSOA for automobile refinishing operations.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-12	Degreasing Operations (326 IAC 2-9-12)	53449	Submit if you are applying for or modifying a SSOA for degreasing operations.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-13	External Combustion Sources (326 IAC 2-9-13)	53450	Submit if you are applying for or modifying a SSOA for external combustion sources.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	OA-14	Internal Combustion Sources (326 IAC 2-9-14)	53451	Submit if you are applying for or modifying a SSOA for internal combustion sources.

**OAQ GENERAL SOURCE DATA APPLICATION****GSD-01: Basic Source Level Information**

State Form 50640 (R5 / 1-10)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch  
100 N. Senate Avenue, MC 61-53 Room 1003  
Indianapolis, IN 46204-2251  
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Toll Free: 1-800-451-6027 x30178 (within Indiana)  
Facsimile Number: (317) 232-6749  
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**NOTES:**

- The purpose of GSD-01 is to provide essential information about the entire source of air pollutant emissions. GSD-01 is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

**PART A: Source / Company Location Information**

<b>1. Source / Company Name:</b> Giles Chemicals Premier Magnesia LLC		<b>2. Plant ID:</b> 029 – 00049	
<b>3. Location Address:</b> 200 Brown St.			
<b>City:</b> Greendale		<b>State:</b> IN	<b>ZIP Code:</b> 47025 –
<b>4. County Name:</b> Dearborn		<b>5. Township Name:</b> Lawrenceburg	
<b>6. Geographic Coordinates:</b>			
<b>Latitude:</b> 39 06' 13.13"N		<b>Longitude:</b> -84 51'55.38"W	
<b>7. Universal Transferal Mercadum Coordinates (if known):</b>			
<b>Zone:</b> 16N	<b>Horizontal:</b> 684579	<b>Vertical:</b> 4330448	
<b>8. Adjacent States:</b> Is the source located within 50 miles of an adjacent state?			
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – <i>Indicate Adjacent State(s):</i> <input type="checkbox"/> Illinois (IL) <input type="checkbox"/> Michigan (MI) <input checked="" type="checkbox"/> Ohio (OH) <input type="checkbox"/> Kentucky (KY)			
<b>9. Attainment Area Designation:</b> Is the source located within a non-attainment area for any of the criteria air pollutants?			
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Indicate Nonattainment Pollutant(s):</i> <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> NO <sub>x</sub> <input type="checkbox"/> O <sub>3</sub> <input type="checkbox"/> PM <input type="checkbox"/> PM <sub>10</sub> <input type="checkbox"/> PM <sub>2.5</sub> <input type="checkbox"/> SO <sub>2</sub>			
<b>10. Portable / Stationary:</b> Is this a portable or stationary source? <input type="checkbox"/> Portable <input checked="" type="checkbox"/> Stationary			

**PART B: Source Summary**

<b>11. Company Internet Address (optional):</b> <a href="http://www.gileschemical.com">www.gileschemical.com</a>
<b>12. Company Name History:</b> Has this source operated under any other name(s)? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Provide information regarding past company names in Part I, Company Name History.</i>
<b>13. Portable Source Location History:</b> Will the location of the portable source be changing in the near future? <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> No <input type="checkbox"/> Yes – <i>Complete Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source.</i>
<b>14. Existing Approvals:</b> Have any exemptions, registrations, or permits been issued to this source? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – <i>List these permits and their corresponding emissions units in Part M, Existing Approvals.</i>
<b>15. Unpermitted Emissions Units:</b> Does this source have any unpermitted emissions units? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>List all unpermitted emissions units in Part N, Unpermitted Emissions Units.</i>
<b>16. New Source Review:</b> Is this source proposing to construct or modify any emissions units? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>List all proposed new construction in Part O, New or Modified Emissions Units.</i>
<b>17. Risk Management Plan:</b> Has this source submitted a Risk Management Plan? <input checked="" type="checkbox"/> Not Required <input type="checkbox"/> No <input type="checkbox"/> Yes → Date submitted: _____ EPA Facility Identifier: — —

### PART C: Source Contact Information

**IDEM will send the original, signed permit decision to the person identified in this section. This person MUST be an employee of the permitted source.**

18. Name of Source Contact Person: Eric Doll

19. Title (optional): Maintenance and Engineering Manager

20. Mailing Address: 200 Brown St.

City: Greendale

State: IN

ZIP Code: 47025 –

21. Electronic Mail Address (optional): edoll@gileschemical.com

22. Telephone Number: ( 812 ) 537 – 4852

23. Facsimile Number (optional): ( ) –

### PART D: Authorized Individual/Responsible Official Information

IDEM will send a copy of the permit decision to the person indicated in this section, if the Authorized Individual or Responsible Official is different from the Source Contact specified in Part C.

24. Name of Authorized Individual or Responsible Official: Andy Goolsby

25. Title: Bulk Operations Manager

26. Mailing Address: 200 Brown St.

City: Greendale

State: IN

ZIP Code: 47025 –

27. Telephone Number: ( 812 ) 537 – 4852

28. Facsimile Number (optional): ( ) –

29. Request to Change the Authorized Individual or Responsible Official: Is the source officially requesting to change the person designated as the Authorized Individual or Responsible Official in the official documents issued by IDEM, OAQ? *The permit may list the title of the Authorized Individual or Responsible Official in lieu of a specific name.*

☐ No ☒ Yes – **Change Responsible Official to:** Andy Goolsby

### PART E: Owner Information

30. Company Name of Owner: Giles Chemical

31. Name of Owner Contact Person:

32. Mailing Address: 102 Commerce Street, PO Box 370

City: Waynesville

State: NC

ZIP Code: 28786 –

33. Telephone Number: ( 828 ) 452 – 4784

34. Facsimile Number (optional): ( ) –

34. Operator: Does the "Owner" company also operate the source to which this application applies?

☐ No – Proceed to Part F below. ☒ Yes – Enter "SAME AS OWNER" on line 35 and proceed to Part G below.

### PART F: Operator Information

35. Company Name of Operator: Giles Chemical

36. Name of Operator Contact Person:

37. Mailing Address: 102 Commerce Street, PO Box 370

City: Waynesville

State: NC

ZIP Code: 28786 –

38. Telephone Number: ( 828 ) 452 – 4784

39. Facsimile Number (optional): ( ) –

### PART G: Agent Information

40. Company Name of Agent: Patriot Engineering and Environmental

41. Type of Agent: ☒ Environmental Consultant ☐ Attorney ☐ Other (specify):

42. Name of Agent Contact Person: Heather Locke

43. Mailing Address: 6150 E 75<sup>th</sup> St,

City: Indianapolis

State: IN

ZIP Code: 46250 –

44. Electronic Mail Address (optional): hlocke@patrioteng.com

45. Telephone Number: ( 317 ) 558 – 5068

46. Facsimile Number (optional): ( ) –

47. Request for Follow-up: Does the "Agent" wish to receive a copy of the preliminary findings during the public notice period (if applicable) and a copy of the final determination? ☐ No ☒ Yes

### PART H: Local Library Information

48. Date application packet was filed with the local library: June 26, 2025

49. Name of Library: Lawrenceburg Public Library District

50. Name of Librarian (optional):

51. Mailing Address: 150 Mary Street

City: Lawrenceburg

State: IN

ZIP Code: 47025 –

52. Internet Address (optional): lpld.lib.in.us

53. Electronic Mail Address (optional): lawplib@lpld.lib.in.us

54. Telephone Number: ( 812 ) 537 – 2775

55. Facsimile Number (optional): ( ) –

### PART I: Company Name History (if applicable)

Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A.

56. Legal Name of Company

57. Dates of Use

to

to

to

to

to

to

to

to

to

to

58. Company Name Change Request: Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ?

☒ No ☐ Yes – Change Company Name to:

Complete this section only if the source is portable and the location has changed since the previous permit was issued. The current location of the source should be listed in Section A.

[illegible]

Complete this section to request a change of location for a portable source.

62. Current Location:		
Address:		
City:	State:	ZIP Code: –
County Name:		
63. New Location:		
Address:		
City:	State:	ZIP Code: –
County Name:		



### PART L: Source Process Description

Complete this section to summarize the main processes at the source.

64. Process Description	65. Products	66. SIC Code	67. NAICS Code
Magnesium sulfate production	Magnesium sulfate solutions	2819	

### PART M: Existing Approvals (if applicable)

Complete this section to summarize the approvals issued to the source since issuance of the main operating permit.

68. Permit ID	69. Emissions Unit IDs	70. Expiration Date
029-46296-00049	FESOP Initial/Renewal	10-17-33

### PART N: Unpermitted Emissions Units (if applicable)

Complete this section only if the source has emission units that are not listed in any permit issued by IDEM, OAQ.

71. Emissions Unit ID	72. Type of Emissions Unit	73. Actual Dates		
		Began Construction	Completed Construction	Began Operation
SCR-2	Magnesium Sulfate Screener	2025		
CT-2	Cooling Tower	2025		

### PART O: New or Modified Emissions Units (if applicable)

Complete this section only if the source is proposing to add new emission units or modify existing emission units.

74. Emissions Unit ID	75. NEW	76. MOD	77. Type of Emissions Unit	78. Estimated Dates		
				Begin Construction	Complete Construction	Begin Operation

## 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)]

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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:	812-537-2382
SIC Code:	2819
County Location:	Dearborn (outside Lawrenceburg Township)
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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This 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 outdoors.~~
- (a) One (1) silo, identified as SILO-1 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 outdoors. SILO-2 is connected to SILO-1 that has a Herding Filtration Process (BF-2) as control, constructed in 2025, and exhausting outdoors.
- (b) One (1) silo, identified as SILO-2 for storing magnesium oxide, constructed in 2018, with a maximum storage capacity of 150 tons each, using a Herding Filtration Process (BF-2) as control, constructed in 2025, and exhausting outdoors. SILO-1 is connected to SILO-2 that has a Flex-Kleen bag filter (BF-1) as control, constructed in 2018, and exhausting outdoors.
- (c) ~~(b)~~ One (1) magnesium sulfate dryer, identified as DRY-1, constructed in 2018, modified in 2021, with a maximum capacity of 110,000 tons per year (25,114 pounds per hour), using ~~a Impinjet scrubber (WS-2)~~ two SLY Impinjet scrubbers (WS-1) and (WS-2) as control, and exhausting outdoors.
- (d) One (1) magnesium sulfate screener, identified as SCR-1, constructed in 2018, modified in 2021, with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using no control. ~~and exhausting outdoors.~~
- (e) One (1) magnesium sulfate screener, identified as SCR-2, to be constructed in 2025 / 2026, with a maximum screening capacity of 16.7 tons per hour, enclosed with a metal shell, using no control.
- (f) 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 combined maximum capacity of 17 tons per hour, using no controls, and each connected to its own bagger hopper.~~
- (i) One (1) super sack packaging line that dumps into sacks, identified as SACK-1, constructed in 2018, with a maximum capacity of 17 tons per hour, connected to its own bagger hopper, and using no controls.
  - (ii) One (1) super sack packaging line that dumps into sacks, identified as SACK-2, constructed in 2018, with a maximum capacity of 17 tons per hour, connected to its own bagger hopper, and using no controls.
  - (iii) ~~(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.

- ~~(g) 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, with a maximum holding capacity of 8.5 tons per hour, using a Impinjet scrubber (WS 2) as control, and exhausting outdoors.~~

(BGHOP-1 no longer exists)

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

This source also 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-4~~, **NGB-1** constructed in 2018, with a maximum heat input capacity of 5.021 MMBtu per hour, **using no control**, combusting natural gas, and exhausting outdoors.
- (b) One (1) NG boiler, identified as ~~NGD-2~~, **NGB-2** constructed in 2021, with a maximum heat input capacity of 5.021 MMBtu per hour, using no control, **combusting natural gas** and exhausting outdoors.

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

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

- a. One (1) Mix Pot, identified as MP-1, constructed in 2018, with capacities of 661 gallons and a maximum rating of 20 tons per hour, using no controls, and exhausts indoors.**
- ~~b. Two (2) sulfuric acid storage tanks, identified as SULF 1 and SULF 2, constructed in 2018, each with maximum storage capacity of 32,000 gallons, using no controls, and exhausting indoors.~~
- b. One (1) sulfuric acid storage tank, identified as SULF-1, constructed in 2018, each with maximum storage capacity of 32,000 gallons, using no controls, and exhausting outdoors.
- c. One (1) sulfuric acid storage tank, identified as SULF-2, constructed in 2018, each with maximum storage capacity of 32,000 gallons, using no controls, and exhausting outdoors
- ~~d. Two (2) primary digesters, identified as P-GID 1 and P-DIG 2, constructed in 2018, each with a maximum capacity of 8,460 gallons and maximum rating of 10 tons per hour, using no controls, and steam exhausting outdoors.~~
- d. One (1) primary digester, identified as P-DIG-1, and one (1) secondary digester,

- identified as S-DIG-1, constructed in 2018, with capacities of 8,460 gallons and 5,922 gallons respectively and a maximum rating of 10 tons per hour, using no controls, and steam exhausts outdoors.
- e. One (1) primary digester, identified as P-DIG-2, and one (1) secondary digester, identified as S-DIG-2, constructed in 2018, with capacities of 8,460 gallons and 5,922 gallons respectively and a maximum rating of 10 tons per hour, using no controls, and steam exhausts outdoors.
  - f. One (1) primary digester, identified as P-DIG-3, and one (1) secondary digester, identified as S-DIG-3, constructed in 2021, with capacities of 15,500 gallons and 6,450 gallons respectively and a maximum rating of 10 tons per hour, using no controls, and steam exhausts outdoors.
  - g. One (1) primary digester, identified as P-DIG-4, and one (1) secondary digester, identified as S-DIG-4, constructed in 2021, with capacities of 15,500 gallons and 6,450 gallons respectively and a maximum rating of 10 tons per hour, using no controls, and steam exhausts outdoors.
  - ~~h. Two (2) secondary digesters, identified as S-DIG-1 and S-DIG-2, constructed in 2018, each with a maximum capacity of 5,922 gallons and maximum rating of 10 tons per hour, using no controls, and steam exhausting outdoors.~~
  - ~~i. 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 6,450 gallons, respectively, each with a maximum rating of 10 tons per hour, using no controls, and steam exhausting outdoors.~~
  - h. One (1) surge tank, identified as ST-1, constructed in 2018, with capacities of 661 gallons and a maximum rating of 20 tons per hour, using no controls, and steam exhausts indoors.
  - i. One (1) Mud Tank, identified as MT-1, constructed in 2018, with capacities of 13,300 gallons and a maximum rating of 40 tons per hour, using no controls, and exhausts indoors.
  - j. One (1) Mud Tank, identified as MT-2, constructed in 2018, with capacities of 13,300 gallons and a maximum rating of 40 tons per hour, using no controls, and exhausts indoors.
  - k. One (1) Mother liquor Tank, identified as MLT-1, constructed in 2018, with capacities of 13,300 gallons and a maximum rating of 10 tons per hour, using no controls, and does not exhaust.
  - l. ~~(k)~~ 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 does not exhaust. ~~exhausting indoors.~~
  - m. 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.~~ does not exhaust.

- n. One (1) filter press, identified as FIL-3, filters wet product, generating wet mud, permitted in 2023, with a maximum process rate of 20,000 pounds per hour, using no controls, and ~~exhausting indoors~~. does not exhaust
- o. One (1) filter press, identified as FIL-4, filters wet product, generating wet mud, permitted in 2023, with a maximum process rate of 20,000 pounds per hour, using no controls, ~~and exhausting indoors~~. does not exhaust
- p. One (1) Brine Tank, identified as BT-1, constructed in 2018, with capacities of 11,200 gallons and a maximum rating of 40 tons per hour, using no controls, and exhausts indoors.
- q. One (1) Brine Tank, identified as BT-2, constructed in 2018, with capacities of 13,300 gallons and a maximum rating of 40 tons per hour, using no controls, and exhausts indoors.
- r. One (1) Cooling Tank, identified as CT-2, constructed in 2018, with capacities of 12,100 gallons and a maximum rating of 4,000 gallons per minute, using no controls.
- s. One (1) Crystallizer, identified as C-1, constructed in 2018, with capacities of 12,350 gallons and a maximum rating of 7 tons per hour, using no controls, and exhausts indoors.
- t. One (1) Crystallizer, identified as C-2, constructed in 2018, with capacities of 12,350 gallons and a maximum rating of 7 tons per hour, using no controls, and exhausts indoors.
- u. One (1) Crystallizer, identified as C-3, constructed in 2021, with capacities of 12,350 gallons and a maximum rating of 7 tons per hour, using no controls, and exhausts indoors.
- v. One (1) Crystallizer, identified as C-4, constructed in 2021, with capacities of 12,350 gallons and a maximum rating of 7 tons per hour, using no controls, exhausts indoors.
- w. One (1) Crystallizer, identified as C-5, constructed in 2021, with capacities of 12,350 gallons and a maximum rating of 7 tons per hour, using no controls, exhausts indoors.
- x. ~~(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 indoors~~. does not exhaust
- y. ~~(h)~~ One (1) centrifuge, identified as CEN-2, permitted in 2021, with a maximum process rate of 10 tons per hour, using no controls, ~~and exhausting indoors~~. does not exhaust
- z. ~~(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 indoors.
- ~~aa. One (1) centrifuge, identified as CEN-2, permitted in 2021, with a maximum process rate of~~



~~10 tons per hour, using no controls, and exhausting indoors.~~

~~bb. 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, each with a maximum rating of 10 tons per hour, using no controls, and steam exhausting outdoors.~~

aa. ~~(j)~~ One (1) cyclone, identified as CY-1, added to wet scrubber WS- 2, permitted in 2021, with an inlet flow on WS-2 of 24,000 ACFM.

~~bb. 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.~~

~~cc. Two (2) filter presses, identified as FIL-3 and FIL-4, filters wet product, generating wet~~

~~dd. mud, permitted in 2023, with a maximum process rate of 20,000 pounds per hour, using no controls, and exhausting indoors.~~

**bb. One (1) chiller, identified as CH1, cools zone 4 of the dryer, permitted in 2025. This is a 39 ton chiller.**

cc. ~~(m)~~ One (1) process cooling tower, identified as Cooling Tower 1, constructed in 2023, with a maximum water circulation rate of 1,500 gallons per minute, using no controls, and exhausting ~~indoors.~~ outdoors.

**dd. One (1) process cooling tower, identified as Cooling Tower 2, constructed in 2025, with a maximum water circulation rate of 3,000 gallons per minute, using no controls, and exhausting outdoors.**

**ee. One (1) recovery water tank to recycle process water, identified as RWT-1, constructed in 2021, with a maximum capacity of 16,300 gallons, using no controls.**

**ff. One (1) recovery water tank to recycle process water, identified as RWT-2, constructed in 2018, with a maximum capacity of 10,200 gallons, using no controls.**

**gg. One (1) recovery water tank to recycle process water, identified as RWT-3, constructed in 2018, with a maximum capacity of 26,200 gallons, using no controls.**

**hh. One (1) recovery water tank to recycle process water, identified as RWT-4, constructed in 2018, with a maximum capacity of 26,200 gallons, using no controls.**

**ii. One (1) liquid magnesium sulfate tank, identified as LMS-1, constructed in 2018, with a maximum capacity of 26,200 gallons, using no controls.**

**jj. One (1) liquid magnesium sulfate tank, identified as LMS-2, constructed in 2018, with a maximum capacity of 26,200 gallons, using no controls.**

**kk. One (1) poly tank to recycle water, identified as PT-1, constructed in 2018, with a maximum capacity of 1,450 gallons, using no controls.**

- ll. One (1) poly tank to recycle boiler water, identified as PT-2, constructed in 2023, with a maximum capacity of 2,200 gallons, using no controls.**
- mm. One (1) poly tank to recycle boiler water, identified as PT-3, constructed in 2023, with a maximum capacity of 2,200 gallons, using no controls.**

A.3 FESOP Applicability [326 IAC 2-8-2]

---

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

**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

**UNLIMITED AND UNCONTROLLED PTE (tons/yr)**

Emission Units	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	HAPs
SILO 1 & 2	6.21	4.00	4.00	-	-	-	-	-
Dryer DRY-1	11,990.00	10,791.00	10,791.00	-	-	-	-	-
NG Boiler NGD-1	0.04	0.16	0.16	0.01	2.16	0.12	5.43	0.04
Screeners SCR-1 and SCR-2	17.56	17.56	17.56					
<sup>a</sup> Digester DIG 1,2,3 & 4	-	-	-	-	-	-	-	-
<sup>b</sup> Centrifuge CEN-1 & CEN-2	-	-	-	-	-	-	-	-
Sack Loading SACK 1 or 2 or bagger	6.75	6.75	6.75	-	-	-	-	-
Bag hopper BIGHOP-1	-	6.75	6.75	-	-	-	-	-
Sparger (Truck Loading)	4.92	4.92	4.92	-	-	-	-	-
Cooling Towers 1 and 2	0.02	0.02	0.02					
Unpaved Roads	0.04	0.01	0.00	-	-	-	-	-
Paved Roads	0.91	0.18	0.04	-	-	-	-	-
<b>Total</b>	<b>12,026.44</b>	<b>10,831.34</b>	<b>10,831.20</b>	<b>0.01</b>	<b>2.16</b>	<b>0.12</b>	<b>5.43</b>	<b>0.04</b>

**LIMITED PTE (tons/yr)**

Emission Units	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	HAPs
SILO 1 & 2	6.21	4.00	4.00	-	-	-	-	-
Dryer DRY-1	56.94	25.0	25.0	-	-	-	-	-
NG Boiler NGD-1	0.04	0.16	0.16	0.01	2.16	0.12	5.43	0.04
Screeners SCR-1 and SCR-2	17.56	17.56	17.56					
<sup>a</sup> Digester DIG 1,2,3 & 4	-	-	-	-	-	-	-	-
<sup>b</sup> Centrifuge CEN-1 & CEN-2	-	-	-	-	-	-	-	-
Sack Loading SACK 1 or 2 or bagger	6.75	6.75	6.75	-	-	-	-	-
Bag hopper BIGHOP-1	0.00	6.75	6.75	-	-	-	-	-
Sparger (Truck Loading)	4.92	4.92	4.92	-	-	-	-	-
Cooling Towers 1 and 2	0.02	0.02	0.02					
Unpaved Roads	0.04	0.01	0.001	-	-	-	-	-
Paved Roads	0.91	0.18	0.04	-	-	-	-	-
<b>Total</b>	<b>93.38</b>	<b>65.31</b>	<b>65.16</b>	<b>0.01</b>	<b>2.16</b>	<b>0.12</b>	<b>5.43</b>	<b>0.04</b>

**Controlled PTE (tons/yr)**

Emission Units	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	HAPs
SILO 1 & 2	0.06	0.04	0.04	-	-	-	-	-
Dryer DRY-1	15.40	13.86	13.86	-	-	-	-	-
NG Boiler NGD-1	0.04	0.16	0.16	0.01	2.16	0.12	5.43	0.04
Screeners SCR-1 and SCR-2	0.18	0.18	0.18					
<sup>a</sup> Digester DIG 1,2,3 & 4	-	-	-	-	-	-	-	-
<sup>b</sup> Centrifuge CEN-1 & CEN-2	-	-	-	-	-	-	-	-
Sack Loading SACK 1 or 2 or bagger	3.38	3.38	3.38	-	-	-	-	-
Bag hopper BIGHOP-1	0.00	0.00	0.00	-	-	-	-	-
Sparger (Truck Loading)	0.25	0.25	0.25	-	-	-	-	-
Cooling Towers 1 and 2	0.02	0.02	0.02					
Unpaved Roads	0.04	0.01	0.001	-	-	-	-	-
Paved Roads	0.91	0.18	0.04	-	-	-	-	-
<b>Total</b>	<b>20.27</b>	<b>18.07</b>	<b>17.93</b>	<b>0.01</b>	<b>2.16</b>	<b>0.12</b>	<b>5.43</b>	<b>0.04</b>

**Notes:**

<sup>a</sup>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.

<sup>b</sup>Centrifuges are inclosed, they take a wet slurry and separate liquid stream from wet cake.

**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

Source ID	Description	Throughput (tons/year)	Throughput (tons/hour)	Emission Factors		Uncontrolled				Controlled			
				PM (lb/ton)	PM10/PM2.5 (lb/ton)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)
SILO-1 & 2	MgO STORAGE SILOS	17000	0.03	0.73	0.47	0.02	6.21	0.01	4.00	0.00	0.06	0.00	0.04

**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 with one Bag Filter and the second one is a Hearinging Filtration 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)

grain / lbs  
0.000365      7000      2.555 grains per hour uncontrolled  
0.02555 grains per hour controlled

50 lbs released  
350000 Totals grains released  
0.03 grains / dscf  
11666666.67  
2000 Flow rate lb/hr  
0.01 lbs/cm3

New Herding PROCESS Filtration - To be installed in July 2025, operational in August 2025

The process unit is sized for 2,000 CFM (3399.8 m<sup>3</sup>/hr)

The expected dust concentration in clean gas is < 0.1 mg/m<sup>3</sup>

**Appendix A: Emissions Calculations**  
**Dryer DRY-1**

**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

Source ID	Description	Throughput (tons/year)	Throughput (tons/hour)	Emission Factors		Uncontrolled				Controlled				Limited				Control efficiency %	
				Uncontrolled PM/PM10/PM2.5 (lb/ton)	Controlled PM/PM10/PM2.5 (lb/ton)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)	PM	PM10/ PM2.5
DRY-1	CARMEN FLUID BED DRYER AND COOLER (MODEL FBP-1594M)	110000	12.56	218	0.28	2737.44	11990.00	2463.70	10791.00	3.52	15.40	3.16	13.86	13.00	56.94	5.70	24.97	0.995	0.998

**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 8.4, Table 8.4-1 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

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

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

Dryer PM10 & PM2.5=0.9% of PM based on CHEM-BAC Laboratory Analysis for PM10 submitted by the source

Control efficiency = 1 - {(Controlled PM/PM10/PM2.5 emissions (lbs/hr)/ Uncontrolled PM/PM10/PM2.5 emission (lbs/hr)}

**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: Emissions Calculations

## Screener SCR-1

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

					Emission Factors	Uncontrolled		Controlled	
Source ID	Description	Capacity (tons/day)	Throughput (tons/hour)	Enclosure Efficiency	PM/PM10/PM2.5 (lb/ton)	PM/PM10/PM2.5 (lbs/hr)	PM/PM10/PM2.5 (tons/yr)	PM/PM10/PM2.5 (lbs/hr)	PM/PM10/PM2.5 (tons/yr)
SCR-1	Screener	400.8	16.70	99%	0.12	2.00	8.78	0.02	0.09
SCR-2	Screener	400.8	16.7	99%	0.12	2.00	8.78	0.02	0.09
						4.01	17.56	0.04	0.18

**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**  
**Sacks (SACK-1 & SACK-2), Bagger (BG-1), ~~Bag Hopper (BGHOP-1)~~**

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

Source ID	Throughput (tons/year)	Enclosure *Control Efficiency	Throughput (tons/hour)	Emission Factors	Uncontrolled		Controlled	
				PM/PM10/PM2.5 (lb/ton)	PM/PM10/PM2.5 (lbs/hr)	PM/PM10/PM2.5 (tons/yr)	PM/PM10/PM2.5 (lbs/hr)	PM/PM10/PM2.5 (tons/yr)
<sup>2</sup> SACK 1	75000	50%	8.56	0.18	1.54	6.75	0.77	3.38
<sup>2</sup> SACK 2	75000	50%	8.56	0.18	1.54	6.75	0.77	3.38
<sup>2</sup> Bagger BG-1	75000	50%	8.56	0.18	1.54	6.75	0.77	3.38
<del>Bag Hopper BGHOP-1</del>				0.18	0.00	0.00	0.00	0.00

**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**  
**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 MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
5.0	1020	43.1

	Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.04	0.16	0.16	0.01	2.16	0.12	1.81

\*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					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	4.5E-05	2.6E-05	1.6E-03	0.04	7.3E-05	0.04

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.1E-05	2.4E-05	3.0E-05	8.2E-06	4.5E-05	1.2E-04
					<b>Total HAPs</b>	<b>0.04</b>
					<b>Worst HAP</b>	<b>0.04</b>

Methodology is the same as above.

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

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

**Appendix A: Emission Calculations  
Cooling Towers - Particulate PTE**

**Company Name:** Giles Chemical  
**Address City IN Zip:** 200 Brown St, Greendale, IN, 47025  
**Permit No.:** F 029-40226-00049  
**Reviewer:**

Emission Unit ID	Emission Unit Description	Maximum Water Circulation Rate (gal/min)	Maximum Total Dissolved Solids Content (PPM)	PM EF (lb/kgal)	PM10 EF (lb/kgal)	PM2.5 EF (lb/kgal)	Uncontrolled PM PTE (tons/yr)	Uncontrolled PM10 PTE (tons/yr)	Uncontrolled PM2.5 PTE (tons/yr)
Cooling Tower 1	Process Cooling Tower	1,500	2500	7.92E-05	7.92E-05	7.92E-05	0.01	0.01	0.01
Cooling Tower 2	Process Cooling Tower	3,024	2500	7.92E-05	7.92E-05	7.92E-05	0.01	0.01	0.01
<b>Total:</b>							<b>0.02</b>	<b>0.02</b>	<b>0.02</b>

**Notes**

Emission Factors are from AP 42, Chapter 13.4, Table 13.4-1 (Induced draft (SCC 3-85-001-01))

Lb/Drift per 1,000 gallons recirculated = 1.7

Lb PM/PM10/PM2.5 per 1,000 gallons recirculated = 0.0000792

From AP-42, Table 13.4-1, Footnote c, (1/1995 version), implied content of TDS in circulating water is 12,000 parts per million (ppm).

**Methodology**

Uncontrolled Emissions (tons/yr) = Maximum Water Circulation Rate (gal/min) x 60 (min/hr) x EF (lb/kgal) x 1 kgal/1,000 gal x Maximum Total Dissolved Solids (ppm) x 1/12,000 ppm x 8,760 hr/yr x 1 ton/2,000 lbs

**Appendix A - Natural Gas Combustion Sources**  
**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:** 2/11/21

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
5.02	1020	43.12

	Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	direct PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
Potential Emission in tons/yr	0.04	0.16	0.16	1.29E-02	2.16	0.12	5.43

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

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

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

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

#### Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	4.5E-05	2.6E-05	1.6E-03	3.9E-02	7.3E-05	0.04

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.1E-05	2.4E-05	3.0E-05	8.2E-06	4.5E-05	1.2E-04
	<b>Total HAPs</b>					<b>0.04</b>
	<b>Worst HAP</b>					<b>0.04</b>

Methodology is the same as above.

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

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



**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

Source ID	Description	Throughput (tons/year)	Throughput (tons/hour)	Emission Factors		Uncontrolled				Controlled			
				PM (lb/ton)	PM10/PM2.5 (lb/ton)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)	PM (lbs/hr)	PM (tons/yr)	PM10/ PM2.5 (lbs/hr)	PM10/ PM2.5 (tons/yr)
Truck load	Product transfer and conveying and loading	3500	0.40	2.81	2.81	1.12	4.92	1.12	4.92	0.06	0.25	0.06	0.25

**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)

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

Average Vehicle Weight Per Trip = 16.5 tons/trip  
 Average Miles Per Trip = 0.00 miles/trip

Unmitigated Emission Factor,  $E_f = k[(s/12)^a][(W/3)^b]$  (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	6.0	6.0	6.0	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	16.5	16.5	16.5	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

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

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

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f$ =	6.50	1.73	0.17	lb/mile
Mitigated Emission Factor, $E_{ext}$ =	4.27	1.14	0.11	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Vehicle (entering plant) (one-way trip)	0.02	0.005	0.0005
Vehicle (leaving plant) (one-way trip)	0.02	0.005	0.0005
<b>Totals</b>	<b>0.04</b>	<b>0.010</b>	<b>0.0010</b>

#### Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]  
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]  
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] \* [Maximum one-way distance (mi/trip)]  
 Average Vehicle Weight Per Trip (ton) = 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)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	8.0	1.0	8.0	11.0	88.0	82	0.016	0.1	45.3
Vehicle (leaving plant) (one-way trip)	8.0	1.0	8.0	22.0	176.0	82	0.016	0.1	45.3
	1.0	1.0	1.0	1.0	1.0	10000	1.894	1.9	691.3
	1.0	1.0	1.0	1.0	1.0	10000	1.894	1.9	691.3
<b>Totals</b>			<b>18.0</b>		<b>266.0</b>			<b>4.0</b>	<b>1473.3</b>

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

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	14.8	14.8	14.8	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

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

Mitigated Emission Factor,  $E_{ext} = E_f * [1 - (p/4N)]$   
where p =  days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
N =  days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f$ =	1.356	0.271	0.0666	lb/mile
Mitigated Emission Factor, $E_{ext}$ =	1.240	0.248	0.0609	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Vehicle (entering plant) (one-way trip)	0.03	0.01	0.001
Vehicle (leaving plant) (one-way trip)	0.03	0.01	0.001
Vehicle (leaving plant) (one-way trip)	0.43	0.09	0.02
Vehicle (entering plant) (one-way trip)	0.43	0.09	0.02
<b>Totals</b>	<b>0.91</b>	<b>0.18</b>	<b>0.04</b>

**Methodology**

Total Weight driven per day (ton/d) = [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 ( = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]  
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]  
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
Mitigated PTE (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 = Particle Matter (<2.5 um)  
PTE = Potential to Emit

**OAQ GENERAL SOURCE DATA APPLICATION****GSD-14: Owners and Occupants Notified**

State Form 51609 (R2 / 1-10)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch  
100 N. Senate Avenue, MC 61-53 Room 1003  
Indianapolis, IN 46204-2251  
Telephone: (317) 233-0178 or  
Toll Free: 1-800-451-6027 x30178 (within Indiana)  
Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

**NOTES:**

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

**Owners And Occupants Notified**

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. **Owner / Occupant Name:** Michael & Monica Ramsey

2. **Date Notified:** 06/25/25

3. **Address:** 9931 Old SR 56

**City:** Aurora

**State:** IN

**ZIP Code:** 47001

4. **Electronic Mail:**

5. **Telephone Number:**

6. **Method of Notification:** ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other (specify):

**Owner / Occupant Name:** Mr. John Teaney

**Date Notified:** 06/25/25

**Address:** PO Box 494, 10837

**City:** Aurora

**State:** IN

**ZIP Code:** 47001

**Electronic Mail:**

**Telephone Number:**

**Method of Notification:** ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other (specify):

**Owner / Occupant Name:** Ken & Jackie Greive

**Date Notified:** 06/25/25

**Address:** 4685 E Laughery Creek Rd

**City:** Aurora

**State:** IN

**ZIP Code:** 47001

**Electronic Mail:**

**Telephone Number:**

**Method of Notification:** ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other (specify):

**Owner / Occupant Name:** City of Greendale, Department of Redevelopment

**Date Notified:** 06/25/25

**Address:** 500 Ridge Ave

**City:** Greendale

**State:** IN

**ZIP Code:** 47025

**Electronic Mail:**

**Telephone Number:**

**Method of Notification:** ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other (specify):

**Owner / Occupant Name:** Brian Bush

**Date Notified:** 06/25/25

**Address:** 9129 East Bend Rd

**City:** Burlington

**State:** KY

**ZIP Code:** 41005

**Electronic Mail:**

**Telephone Number:** ( ) -

**Method of Notification:** ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other (specify):

### Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

7. Owner / Occupant Name: MGPI of Indiana LLC		8. Date Notified: 06/25/25	
9. Address: 100 Commercial St			
City: Atchison		State: KS	ZIP Code: 66002
10. Electronic Mail:		11. Telephone Number:	
12. Method of Notification: <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):			
Owner / Occupant Name: Anthony M & Jessica Smart		Date Notified: 06/25/25	
Address: 141 Ridge Ave			
City: Greendale		State: IN	ZIP Code: 47025
Electronic Mail:		Telephone Number:	
Method of Notification: <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):			
Owner / Occupant Name: William Smith		Date Notified: 06/25/25	
Address: 25570 Easy Way Dr			
City: Guilford		State: IN	ZIP Code: 47022
Electronic Mail:		Telephone Number:	
Method of Notification: <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):			
Owner / Occupant Name:		Date Notified:	
Address:			
City:		State:	ZIP Code:
Electronic Mail:		Telephone Number:	
Method of Notification: <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):			
Owner / Occupant Name:		Date Notified:	
Address:			
City: Burlington		State: KY	ZIP Code:
Electronic Mail:		Telephone Number: (     )     -	
Method of Notification: <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):			



**OAQ GENERAL SOURCE DATA APPLICATION****GSD-15: Government Officials Notified**

State Form 51608 (R3 / 1-10)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch  
100 N. Senate Avenue, MC 61-53 Room 1003  
Indianapolis, IN 46204-2251  
Telephone: (317) 233-0178 or  
Toll Free: 1-800-451-6027 x30178 (within Indiana)  
Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

**NOTES:**

- The purpose of GSD-15 is to identify local government officials that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

**Government Officials Notified**

Use this table to identify local government officials that should be notified pursuant to Indiana Code (IC) 13-15-3-1 that an air permit application has been submitted. If you need additional space, you may make copies of this form.

<b>Name:</b>	<b>Date Notified:</b> June 20, 2025
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<b>Title:</b> Dearborn County Commissioner
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<b>Address:</b> 215 B West High Street
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<b>City:</b> Lawrenceburg	<b>State:</b> IN	<b>ZIP Code:</b> 47025
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<b>Electronic Mail:</b>	<b>Telephone Number:</b>
-------------------------	--------------------------

<b>Method of Notification:</b> <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):
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<b>Name:</b>	<b>Date Notified:</b> June 20, 2025
--------------	-------------------------------------

<b>Title:</b> Dearborn County Health Department
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<b>Address:</b> 215 B West High Street
----------------------------------------

<b>City:</b> Lawrenceburg	<b>State:</b> IN	<b>ZIP Code:</b> 47025
---------------------------	------------------	------------------------

<b>Electronic Mail:</b>	<b>Telephone Number:</b>
-------------------------	--------------------------

<b>Method of Notification:</b> <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):
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<b>Name:</b> Kelly Mollaun	<b>Date Notified:</b> June 20, 2025
----------------------------	-------------------------------------

<b>Title:</b> Mayor of Lawrenceburg
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<b>Address:</b> 230 Walnut Street (PO Box 4166)
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<b>City:</b> Lawrenceburg	<b>State:</b> IN	<b>ZIP Code:</b> 47025
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<b>Electronic Mail:</b>	<b>Telephone Number:</b> ( ) -
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<b>Method of Notification:</b> <input type="checkbox"/> Telephone <input type="checkbox"/> Electronic Mail <input checked="" type="checkbox"/> Standard Mail <input type="checkbox"/> Other (specify):
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June 25, 2025

Lawrenceburg Public Library  
150 Mary Street,  
Lawrenceburg, IN 47025

Air Permit Modification Application  
Giles Chemical Premier Magnesia, LLC  
200 Brown Street  
Greendale, IN 47025  
Dearborn County  
Patriot Project No. 25-0073-09E  
FESOP Permit Number: 029-46296-00049

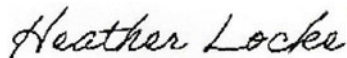
Dear Librarian:

On behalf of Giles Chemical Premier Magnesia, LLC, (Premer Magnesia) Patriot Engineering and Environmental, Inc. (*Patriot*) is providing the public library with a copy of an air permit application to modify the current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049, to add insignificant units to the permit for its Greendale, IN, facility. The Indiana Department of Environmental Management (IDEM) requires that the information contained in the application is to remain available for public review for the next three (3) months.

We would appreciate your acknowledgement of receiving the air permit application documents by signing below. IDEM also requires Premier Magnesia to provide proof of submittal to the local library. The proof of submittal can be sent back to me at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or faxed to (317) 576-1965, or sent by mail at 6150 E 75th Street, Indianapolis, IN 46250.

If you have any questions, please contact me at (317) 558-5068. Thank you for your assistance.

Thank you for your assistance.



Sincerely, Patriot Engineering and Environmental, Inc.  
Heather Locke

Environmental Compliance Manager  
cc: Patriot Engineering and Environmental, Inc.

Received by:

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 25, 2025

Mr. and Mrs. Michael & Monica Ramsey  
9931 Old SR 56  
Aurora, IN 47001

To Mr. and Mrs. Ramsey:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Mr. and Mrs. Anthony M & Jessica Smart  
141 Ridge Ave  
Greendale, IN 47025

To Mr. and Mrs. Smart:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Mr. William Smith  
25570 Easy Way Dr  
Guilford, IN 47022

To Mr. Smith:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager





**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Mr. John Teaney  
PO Box 494, 10837  
Aurora, IN 47001

To Mr. Teaney:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Mr. and Mrs. Ken & Jackie Greive  
4685 E Laughery Creek Rd  
Aurora, IN 47001

To Mr. and Mrs. Greive:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

City of Greendale, Department of Redevelopment  
500 Ridge Ave  
Greendale, IN 47025

To Whom It May Concern:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Mr. Brian Bush  
9129 East Bend Rd  
Burlington, KY 41005

To Mr. Bush:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

MGPI of Indiana LLC  
100 Commercial St  
Atchison, KS 66002

To Whom It May Concern:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager





**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 25, 2025

Dearborn County Health Department  
215 B West High Street  
Lawrenceburg, IN 47025

To Whom It May Concern:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke  
Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 20, 2025

Dearborn County Commissioner  
215 B West High Street  
Lawrenceburg, IN 47025

Dear County Commissioner:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke

Senior Environmental Compliance Manager



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

June 25, 2025

The Honorable Kelly Mollaun  
Mayor of Lawrenceburg  
230 Walnut Street  
PO Box 4166  
Lawrenceburg, IN 47025

Dear Mayor Mollaun:

On behalf of Giles Chemical Premier Magnesia, LLC (Premier Magnesia) located at 200 Brown Street, Greendale, IN 47025, in Dearborn County, Patriot Engineering and Environmental, Inc. (*Patriot*) is providing you with this notice of intent for Premier Magnesia to apply for a minor modification to their current Federally Enforceable State Operating Permit (FESOP) Permit Number: 029-46296-00049 in order to add insignificant units.

A copy of Premier Magnesia's permit application will be placed in the Lawrenceburg Public Library located at 150 Mary Street, Lawrenceburg, IN 47025 on June 26, 2025, and will be available for review. A public notice of issuance of the draft permit will be published by IDEM in the local newspaper.

Any questions may be directed to me at 317.558.5068 or at [hlocke@patrioteng.com](mailto:hlocke@patrioteng.com) or the IDEM, Office of Air Quality, Permits Branch, 100 N. Senate Avenue, MC 61 - 53, Room 1003, Indianapolis, Indiana 46204-2251 or call IDEM at 317-233-0178.

Sincerely,  
Patriot Engineering and Environmental Inc.

*Heather Locke*

Heather Locke

Senior Environmental Compliance Manager