

Premier Chemicals, LLC
Port St. Joe Facility
Facility ID No.: 0450001
Gulf County

Federally Enforceable State Operating Permit
Permit No.: 0450001-005-AF

Permitting and Compliance Authority:
Department of Environmental Protection
Northwest District Office
160 Governmental Center, Suite 308
Pensacola, FL 32502-5794
Telephone: 850/595-8300
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[electronic file name: 0450001-005-AF.doc]



Federally Enforceable State Operating Permit
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Florida Department of Environmental Protection

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Secretary

Permittee:
Premier Chemicals, LLC

Permit No.: 0450001-005-AF
Facility ID No.: 0450001
SIC No(s): 32, 3295
Project: Federally Enforceable State Operating Permit

This renewal permit is for the Premier Chemicals, LLC, Port St. Joe facility located at SR 382 North, Gulf County; UTM Coordinates: Zone 16, 664.7 km East and 3302.8 km North; Latitude: 29° 51' 00" North and Longitude: 85° 18' 45" West.

STATEMENT OF BASIS: This Federally Enforceable State Operating Permit (FESOP) is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix G-1, General Conditions
Appendix SS-1, Stack Sampling Facilities

Effective Date: September 30, 2009
Renewal Application Due Date: August 1, 2014
Expiration Date: September 30, 2014

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

/s/

Rick Bradburn
Air Program Administrator

RB/aj/c

Section I. Facility Information.

This permit follows Permit No. 0450001-004-AF, effective date August 27, 2004.

{Permit Note: As of September 24, 2009 all air emission units for this facility are shut down. The facility ceased operation of the drying and grinding equipment on September 22, 2006. Only the wet end of the process continues; i.e., magnesium oxide.}

Subsection A. Facility Description.

Premier Chemicals, LLC, Port St. Joe facility manufactures magnesia products [that contain Magnesium Oxide (MgO) and Magnesium Hydroxide (Mg(OH)₂)]. These magnesia products are manufactured using dolomitic lime, sulfuric acid, seawater and granular triple superphosphate (GTSP) as raw materials. Dolomitic lime (typically calcium oxide and magnesium oxide) is stored, crushed and hydrated with recycled process water. The hydrated lime is reacted with sulfuric acidified seawater and magnesium hydroxide seed resulting in a magnesium hydroxide precipitate which is washed, filtered and stored as sludge for future use.

Utilizing the facility's two multi-hearth natural gas fired furnaces, magnesium hydroxide sludge is calcined to produce MgO (Magox), or dried to produce powdered Mg(OH)₂. Emissions from the two multi-hearth furnaces are controlled by individual baghouses. Both products are stored, or processed further with grinding, pelletizing, etc. Products include Aquamag [Mg(OH)₂ slurry], Aquamag SW (dried, powdered Aquamag), Magox (powdered MgO), Magox HB (dried hard-burned MgO pellets), and Enviroblend (MgO and GTSP).

The facility was constructed in the late 1950s, and the calciners, rotary kiln and filter building have been continuously permitted since mid-1972. These activities precede the effective date of potentially applicable NSPS requirements (40 CFR 60 subpart UUU - Calciners and Dryers), which would be applicable if the multi-hearth furnaces were reconstructed or modified. Activities that process raw materials into products through chemical or physical changes (calciners, rotary kiln, grinding, pelletizing) are subject to the Rule 62-296.320(4)(a), F.A.C. (Process Weight Table). The facility's processing equipment is not currently subject to 40 CFR Part 60 subpart OOO – Nonmetallic Mineral Processing Plants, because equipment operations began before the August 31, 1983 compliance date of the subpart. This subpart will become applicable upon the processing equipment's modification or reconstruction. Any future modification to the facility's furnaces and/or subpart OOO-applicable process equipment shall be evaluated with respect to the NSPS applicability (Subparts UUU and OOO).

Based on the permit application received July 6, 2009, this facility is not a major source of hazardous air pollutants (HAP).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

ID No.

Brief Description

006	Natural gas fired Multi-Hearth Furnace No. 1 w/ emissions controlled by a baghouse
007	Natural gas fired Multi-Hearth Furnace No. 2 w/ emissions controlled by a baghouse
010	Magnesium oxide grinding controlled by a baghouse
012	Miscellaneous Activities not subject to the process weight table controlled by baghouses

Premier Chemicals, LLC
Port St. Joe Facility
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Permit No.: 0450001-005-AF

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s), on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:
Permit Application (EPSAP No.2322-1) received July 6, 2009

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX G-1, GENERAL CONDITIONS, is a part of this permit.
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants that cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standards contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests that identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
5. An Annual Operating Report for Air Pollutant Emitting Facility, DEP Form 62-210.900(5), shall be submitted for each year by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. [Rule 62-210.370(3)(c), F.A.C.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined (fugitive) particulate matter at this facility include:
 - a. Application of water to paved and unpaved areas and other plant grounds where vehicles travel, if a visible plum of 10 feet or more from the source is observed.
 - b. Application of water sprinklers as needed.
 - c. Use of speed limits on plant property.
 - d. Removal of particulate matter from buildings and work areas so that they will not become airborne.
 - e. Enclosing or covering material handling and transfer systems, if feasible and necessary, to eliminate or minimize fugitive dust.[Rule 62-296.320(4)(c)2., F.A.C.; permit 0450001-004-AF]

8. Permittee shall install and maintain permanent stack sampling facilities, including sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet requirements of Rule 62-297(6), F.A.C., and any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910 subparts D and E. [Rule 62-297.310(6), F.A.C.]

9. The permittee shall submit all compliance related notifications and reports required by this permit to the Department's Northwest District office.

Department of Environmental Protection
Northwest District Office
160 Governmental Center, Suite 308
Pensacola, Florida 32502-5794

Notification of compliance testing may be submitted by electronic mail to nwdair@dep.state.fl.us. A copy of all compliance related notifications shall be sent to the Northwest District Branch Office in Panama City at 2353 Jenks Ave, Panama City FL 32405.

10. Sixty days prior to the expiration date of this operation permit, the Permittee shall submit two permit renewal applications using the current version of the renewal form along with the processing fee established in Rule 62-4.050(4), F.A.C., to the Northwest District office of the Department.
[Rule 62-4.090, F.A.C.]

11. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is 850/595-8300, extension 1220, day or night, and for emergencies involving a significant threat to human health or the environment is 800/320-0519. For routine business, telephone 850/595-8300, then press 7, during normal working hours. [Rules 62-210.700 and 62-4.130, F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

E.U.

ID No. Brief Description

006	Natural gas fired Multi-Hearth Furnace No. 1 w/ emissions controlled by a baghouse
007	Natural gas fired Multi-Hearth Furnace No. 2 w/ emissions controlled by a baghouse

These natural gas fired furnaces were constructed in 1959 with a maximum heat input of 43.8 MMBtu/hr, and a maximum wet sludge input of 11.6 TPH (6.5 TPH dry basis). Furnace 1 and 2 share a common stack and are in long-term shutdown. If and when they are placed back in operation, the facility is required to test for emissions within 30 days of startup.

Emissions are controlled by a separate baghouse for each furnace (Wheelabrator Corporation No. 608 Model 342, Series 115 Knocked Down Type, Six Compartment, Continuous Automatic DUSTUBE Dust Collector System). Emissions from furnaces 1 and 2 discharge through a vertical stack (ID SV 06-07) 6' in diameter and 70' high.

These emission units are subject to Rule 62-296.320(4)(a), F.A.C. (process weight table), since they process wet sludge through a physical or chemical change. However, the permittee has requested a lower particulate matter (PM) limit of 14.3 TPY in order to remain below the major source threshold (TV Avoidance). Initial testing has been incorporated into this permit to verify compliance with these lower limits (synthetic minor limits). The existing furnaces precede the effective dates of applicable NSPS requirements (40 CFR 60 subpart UUU - Calciners and Dryers).

{Permit Note: This permit allows a waiver of periodic PM compliance testing, incorporating an alternate compliance standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Capacity. The maximum process throughput rate and heat input (for each furnace) shall not exceed the following:

<u>EU</u>	<u>Description</u>	<u>Operation rate/tons processed</u>	<u>Heat Input</u>
		<u>TPH Wet Sludge</u>	<u>MMBtu/hr</u>
006	Multi Hearth Furnace No. 1	11.6	43.8
007	Multi Hearth Furnace No. 2	11.6	43.8

These operating rates identify the capacity of each emission unit for emissions testing purposes. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

A.2. Methods of Operation - (i.e., Fuels). These emissions units may operate using pipeline quality natural gas. The permittee shall track fuel usage by emission unit and facility overall. The permittee shall maintain a log available for Department inspection of the fuel usage.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

A.3. Hours of Operation. This emissions unit is allowed to operate continuously; i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A.4. Particulate Matter. Particulate matter shall not exceed the following:

<u>EU</u>	<u>Description</u>	<u>(lbs/hr*)</u>	<u>tons/yr</u>
006	Multi Hearth Furnace no. 1	(3.3)*	14.3
007	Multi Hearth Furnace no. 2	(3.3)*	14.3

*The limit in lbs/hr is only for testing purposes and is averaged over the test period.

[Rules 62-296.320(4)(a) and 62-210.300(2)(b), F.A.C.; permit 0450001-004-AF]

A.5. Visible Emissions. Visible emissions shall not exceed 5% opacity. This alternate compliance standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C., is to allow a waiver of periodic PM compliance testing. [Rule 62-297.620, F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

Test Methods and Procedures

A.6. Particulate Matter. The test method for particulate matter shall be EPA Method 5 or 5A, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-4.070 and 62-297.401, F.A.C.]

A.7. Each unit (two baghouses share a common stack) shall demonstrate compliance with the visible emissions (VE) limit in accordance with EPA Method 9. The duration of testing shall be at least 30 minutes. [Rules 62-297.310(4)2 and 62-297.401(9), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

Monitoring of Operations and Record keeping

A.8. The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or eight hour intervals, whichever is more frequent, when these emissions units are in operation. [Rule 62-4.070(3), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

Special Conditions

A.9. These emission units are in long-term reserve shutdown. Prior to placing either of these emission units back in operation, the permittee shall:

- Advise the Department within seven days of startup of the date on which the furnace was brought online.
- Conduct tests for visible emissions within 30 days of startup.

[Rule 62-210.300, F.A.C.; permit 0450001-004-AF]

A.10. This emissions unit is also subject to the **Common Conditions** contained in **Subsection D**.

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit.

E.U. ID

No.

Brief Description

010 Magnesium oxide grinding controlled by a baghouse

Emissions Unit 010 is a combination of a Roller Mill and an Air Classifier. Magnesium Oxide is first passed through the Air Classifier where course particles are separated from the finer particles. Next, the course particles are sent to the Roller Mill where they are ground to a size that will allow them to pass back through the Air Classifier as finished product. The grinding and classification process uses a closed loop recirculation air system. A Fuller Dracco Baghouse Model 48315008 maintains a negative pressure in the system to control emissions. Dust collected in the baghouse is fed back to the system. Emissions discharge through a horizontal stack (ID "Raymond Mill) 18" by 28" and 65' above the ground surface.

This activity is subject to Rule 62-296.320(4)(a), F.A.C. (process weight table), since magnesium oxide is processed through a physical or chemical change. PM emissions are limited to 18.1 lbs/hr consistent with the process weight table (equivalent to 79.0 TPY). However, the permittee has requested a lower PM limit of 26.0 TPY in order to remain below the major source threshold (Title V Avoidance).

{Permit Note: The permit allows a waiver of periodic PM compliance testing, incorporating an alternate compliance standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C.}

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The maximum process throughput rate is 13.5 TPH grinding magnesium oxide. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

B.2. Hours of Operation. These emissions unit are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

B.3. Particulate Matter. Particulate matter shall not exceed 26.0 tons per year. For testing purposes, this is equivalent to 5.94 lbs/hr averaged over the testing period. [Rule 62-296.320(4)(a), F.A.C.; permit 0450001-004-AF]

B.4. Visible Emissions. Visible emissions shall not exceed 5% opacity. This alternate compliance standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C., is to allow a waiver of periodic PM compliance testing. [Rule 62-297.620, F.A.C.; permit 0450001-004-AV]

Test Methods and Procedures

B.5. Particulate Matter. The test method for particulate matter shall be EPA Method 5 or 5A, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-4.070 and 62-297.401, F.A.C.]

B.6. Visible Emissions. The test method for visible emissions shall be EPA Method 9 (30 minutes), incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-4.070 and 62-297.401, F.A.C.]

Record Keeping

B.7. The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or eight hour intervals, whichever is more frequent, when these emission units are in operation. [Rule 62-4.070(3), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

B.8. This emissions unit is also subject to the **Common Conditions** contained in **Subsection D.**

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
012	Miscellaneous Activities

This emissions unit contains activities not subject to the process weight table but controlled by baghouses. These activities are:

Activity	Baghouse Model and ID No.
Bins P-1, P-2, and P-3	CP Environmental Filter, Inc./84BRO25
LB Bins 1, 2, and 3	Fuller Plenum Pulse Collector/Model "A"
LB Bins 4, 5, and 6	Fuller Plenum Pulse Collector/Model "A"
MgO Bulk Bagger and Baggers 1, and 2	Fuller Plenum Pulse Collector/Model "A"
MgO Loadout Bins B-1, B-2, and B-3	Fuller Plenum Pulse Collector/Model "A"
Multi-hearth product Storage Bins 1, and 2	CP Environmental Filter, Inc./84BRO25

In addition to the above bins that facility operates four other bins (Bins 14 – 17), which exhaust into a building. Potential PM emissions from these units (Bins 14 – 17) have been estimated at 0.9 tons/year. The potential PM emissions from the above depicted units and Bins 14 – 17 have been estimated at 12.7 tons/year.

{Permit Note: This emissions unit is not subject to any activity-specific regulation. The baghouses have been determined to be an integral part of the process for product recovery. Therefore, no routine testing is required. However, this emission unit is subject to the Section II Facility-Wide Conditions.}

Section III. Emissions Unit(s) and Conditions.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
006	Natural gas fired Multi Hearth Furnace No. 1 with emissions controlled by a baghouse
007	Natural gas fired Multi Hearth Furnace No. 2 with emissions controlled by a baghouse
010	Magnesium oxide grinding controlled by a baghouse

The following specific conditions apply to the emissions units listed above:

Subsection D. Common conditions.

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A and B for applicability.}

Test Methods and Procedures

D.1.a. Visible Emissions tests are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. The tests shall be conducted once during each federal fiscal year (October 1 through September 30). The Permittee shall notify the Department at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing. [Rules 62-4.070, 62-297.310(7) and 62-297.401(9), F.A.C.]

D.1.b. The test reports shall comply with applicable portions of Rule 62-297.310, F.A.C., Test Reports. The Department can require special compliance tests in accordance with Rule 62-297.310(7) F.A.C. Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing. [Rules 62-297.310(7) and 62-297.620(1), F.A.C.]

D.1.c. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, sources may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. [Rules 62-297.310(2) and 62-4.070(1), F.A.C.]

D.2. Compliance with the PM emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emission unit does not satisfactorily demonstrate compliance with the opacity standard of 5%, this emission unit shall demonstrate compliance by EPA Method 5 within 45 days of the EPA Method 9 testing. [Rule 62-297.620(4), F.A.C.; permits 0450001-002-AV and 0450001-004-AF]

D.3. Determination of Process Variables/Monitoring of Operations

Determination of Process Variables

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5)(a) and (b), F.A.C.]

D.4. Excess Emissions

Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer durations. [Rule 62-210.700(1), F.A.C.]

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Appendix G-1

GENERAL CONDITIONS:

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1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions", and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of:

- a. Have access to and copy any records that must be kept under conditions of this permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages that may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the Department approves the transfer.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]



Florida Department of Environmental Protection

Memorandum

TO: Rick Bradburn
THROUGH: Armando I. Sarasua, P.E.
FROM: Angelia Jackson
DATE: September 30, 2009
SUBJECT: Evaluation Summary for Premier Chemicals, LLC, Port St. Joe Facility 0450001-005-AF, Gulf County

We recommend issuing a renewal federally enforceable operating permit (FESOP) to Premier Chemicals, LLC to operate their Port St. Joe Facility. This permit follows 0450001-004-AF, effective date August 27, 2004.

Process Description.

The Premier Chemicals, LLC, Port St. Joe facility manufactures magnesia products [that contain Magnesium Oxide (MgO) and Magnesium Hydroxide (Mg(OH)₂)]. These magnesia products are manufactured using dolomitic lime, sulfuric acid, seawater and granular triple superphosphate (GTSP) as raw materials. Dolomitic lime (typically calcium oxide and magnesium oxide) is stored, crushed and hydrated with recycled process water. The hydrated lime is reacted with (sulfuric) acidified seawater and magnesium hydroxide seed resulting in a magnesium hydroxide precipitate which is washed, filtered and stored as sludge for future use.

Utilizing the facility's two multi-hearth natural gas fired furnaces, magnesium hydroxide sludge is calcined to produce MgO (Magox), or dried to produce powdered Mg(OH)₂. Emissions from the two multi-hearth furnaces are controlled by individual baghouses. Both products are stored, or processed further with grinding, pelletizing, etc. Products include Aquamag [Mg(OH)₂ slurry], Aquamag SW (dried, powdered Aquamag), Magox (powdered MgO), Magox HB (dried hard-burned MgO pellets), and Enviroblend (MgO and GTSP).

Pollution Control Equipment.

PM emissions are controlled by baghouses or vent filters. Combustion emissions are vented to the atmosphere.

Environmental Impact.

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions		Allowable Emissions	
		lbs/hr	T/yr	lb/hr	T/yr
PM	N/A	N/A	12.7*	N/A	54.6**
SO ₂	N/A	N/A	0.3**	N/A	N/A
VOC	N/A	N/A	4.2**	N/A	N/A
NO _x	N/A	N/A	37.8**	N/A	N/A
CO	N/A	N/A	31.8**	N/A	N/A
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property	
VE ²	62-297.620(4)	N/A	N/A	Not more than 5% opacity	

(* EU012; ** EUs 006/007/010)

Note: This permit allows a waiver of periodic PM compliance testing by incorporating an alternate compliance standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C.

Applicable Rules & Regulations.

This source is regulated in accordance with Rules 62-296.320(4), F.A.C. - Process Weight Table, and 62-297.620(4), F.A.C. - PM testing wavier for 5% opacity with a baghouse. Permittee requested a lower PM limit, with respect to EUs 006, 007, and 010, to avoid Title V permitting [Rule 62-210.300(2)(b), F.A.C.]

Compliance Monitoring.

Annual Method 9 VE testing and recording of the baghouses pressure drop every eight hours.

Compliance History.

Compliance inspections for 2009 – 2005 noted the facility to be “In-Compliance.”

Fee Summary.

This is an AF2B (\$1,000 x 2) minor source - other sample = \$2,000.

Additional Notes

{Permit Note: As of September 24, 2009 all air emission units for this facility are shut down. The facility ceased operation of the drying and grinding equipment on September 22, 2006. Only the wet end of the process continues; i.e., magnesium oxide.}