FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

United States Gypsum Co.
6825 Evergreen Ave.
Jacksonville, FL 32208-4996

Authorized Representative:
Mike Favo, Plant Manager

Air Permit No. 0310072-022-AC
Permit Expires: October 8, 2014

Jacksonville Facility
Minor Source Air Construction Permit
Wallboard Coating Booth and MBR
Kettle Nos. 1 and 4

This is the final air construction permit, which authorizes these modifications: (EU108) Wallboard Line 1 will no longer produce wallboard. This project will modify (EU108) Wallboard Production Line No.1, by installing a wallboard coating booth that will be used to apply a coating to finished wallboard produced in the other Wallboard Production Lines Nos. 2 an 3. The Dryer Burners/Kiln associated with Wallboard Production Line 1 and the use of the existing End Saws at EU077 will continue to be used in the Wallboard Coating Booth process. This project also will increase the firing rates of the burners (EU092) for the production of heat at the calcining kettles associated with MBR Kettle Nos. 1 and 4 from 15 MMBtu/hr to 20 MMBtu/hr.

The proposed work will be conducted at the Jacksonville Facility, which is a Gypsum Wallboard Manufacturer (Standard Industrial Classification No. 3275). The facility is located in Duval County at 6825 Evergreen Ave., Jacksonville, Duval County, FL.; UTM Coordinates: Zone 17, 438.9 km East and 3361.2 km North; Latitude: 30° 22′ 52″ North and Longitude: 81° 38′ 07″ West.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on October 8, 2013 to the persons listed below.

Mike Favo, Plant Manager- United States Gypsum Corporation (mfavo@usg.com)
Jim Parnell, Plant Engineer- United States Gypsum Corporation (jparnell@usg.com)
Scott A. McCann, P.E. of Record- Golder Associates Inc. Company (scott_mccann@golder.com)
Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Clerk) October 8, 2013 (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility consists of a manufacturing plant for the production of gypsum wallboard. Gypsum ore is received at the plant by ship or barge and unloaded into stockpiles. Gypsum ore is then conveyed to the crushing and conveying system. Crushed ore is dried and then conveyed to the landplaster system where the crushed gypsum is further ground in the Raymond mills. The finely ground and dried gypsum (known as landplaster) is conveyed to the stucco production area where the landplaster is introduced into calcining kettles which by indirect heating drives off the chemically bound water from the landplaster which turns it into a product called stucco. Stucco is then dry mixed with other additives and introduced to the pin mixer where water is added to the mix. The liquid stucco mix is then introduced between two sheets of paper (or glass mat) in the wallboard forming machine to form wallboard. The wet wallboard is dried on the conveying line at the wallboard dryer, cut, end-trimmed and stacked for distribution.

The facility also consists of a joint treatment compounds manufacturing operation using the major raw materials calcium carbonate, perlite, clay, and mica. These materials are delivered by railcar and stored in silos (EU Nos. 101 through 105). Raw materials from these silos are processed through the Wet and Dry Premixer System (EU 106) where the dry raw materials are mixed in dry premixers and then transferred to wet mixers where liquid additives are added to produce a paste. The paste proceeds from the wet mixers to the Joint Treatment Pail Fill Stations. Small quantities of other dry raw materials are added to the Dry Premixers from the Joint Treatment Bag Dumpstation (EU107). These final products are shipped out for consumer use and are not used to manufacture wallboard. There are no crushers or grinding operations associated with the production of joint treatment compounds and this operation is not connected by conveyor to the crusher, screening operation nor grinding mills in the wallboard manufacturing operation, therefore EU Nos. 101 through 107 associated with the manufacture of joint treatment compounds are not subject to the provisions of New Source Performance Standards (NSPS), 40 Code of Federal Regulation (CFR) 60, Subpart OOO, Standards of Performance for Non-Metallic Mineral Processing Plants.

The existing facility consists of the following emissions units.

Facility ID No. 0310072	
ID No.	**Emission Unit Description**
005	Textures Bulk Calcium Carbonate Unloading and Supply System
006	No. 3 Stucco storage Bin
007	No. 4 Stucco storage Bin
037	No. 2 Raymond Mill
039	No. 5 & 6 Calcining Kettles
040	No. 2 Stucco Storage Bin
042	No. 2 Board Plant End Saws
043	No. 3 Raymond Mill and No. 7 Kettle Landplaster Elevator
048	Rotary Rock Dryer
054	Waste Board Reclaim System
057	No. 7 Calcining Kettle
058	Storage Bin No. 1
060	No. 5 Raymond Mill
061	No. 3 Board Plant Stucco Elevator, Screen, and Additive Screw
062	No. 3 Board Plant Starch Stucco Bins

Cont:

ID No.	Emission Unit Description
063	No. 3 Board Plant End Saws
064	No. 3 Board Plant Stucco Feed Bin
065	No. 3 Board Plant Vermiculite/Starch Storage Bin
066	No. 6 Raymond Mill and Rock Screw
077	No. 1 Board Plant End Saws
088	Dunnage Machine Sawing Operation
089	No. 4 Raymond Mill
090	No. 3 Board Plant Ball Mill
092	Kettle Burners
093	Synthetic Gypsum Feed System
094	Gypsum Rock Unloading, Conveying, and Storage System
095	No. 1 MBR Calcining Kettle
096	No. 4 MBR Calcining Kettle
097	Nos. 2 & 3 Calcining Kettles
098	Cleaver Brooks Boiler No. 1
099	Cleaver Brooks Boiler No. 2
100	Cleaver Brooks Boiler No. 3
101	Joint Treatment No. 1 Carbonate Silo
102	Joint Treatment No. 2 Carbonate Silo
103	Joint Treatment Mica Silo
104	Joint Treatment Clay Silo
105	Joint Treatment Talc/Perlite Silo
106	Joint Treatment (Wet and Dry) Premixer System
107	Joint Treatment Bag Dumpstation
108	Wallboard Production Line No. 1
109	Wallboard Production Line No. 2
110	Wallboard Production Line No. 3
111	No. 3 Board Plant Starch Receiver/Refill Bin
112	Emergency Fire Pump and Generator Diesel Engines

Proposed Project

(EU108) Wallboard Line 1 will no longer produce wallboard. This project will modify (EU108) Wallboard Production Line No.1, by installing a wallboard coating booth that will be used to apply a coating to finished wallboard produced in the other Wallboard Production Lines Nos. 2 an 3. The Dryer Burners/Kiln associated with Wallboard Production Line 1 and the use of the existing End Saws at EU077 will continue to be used in the Wallboard Coating Booth process. This project also will increase the firing rates of the burners (EU092) for the production of heat at the calcining kettles associated with MBR Kettle Nos. 1 and 4 from 15 MMBtu/hr to 20 MMBtu/hr.

This project will modify the following emissions units.

Facility ID No. 0310072

ID No.	Emission Unit Description
092	Kettle Burners
108	Wallboard Production Line No. 1

Facility Regulatory Classification

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **has no** units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility **is not** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Waste and Air Resource Management Program. The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office, Compliance Assurance. The mailing address and phone number of the Northeast District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256 and Phone Number 904) 256-1700.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. EU092- Kettle Burners

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
092	Kettle Burners

Emission Unit Description: Burners for the production of heat for the calcining kettles.

A.0. **Relation to Other Permits.** The conditions of this permit will supplement conditions of all existing, valid, Department permits.

[Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

A.1. **Maximum Heat Input MBR Kettle Burners No. 1 and No. 4.** The maximum heat input to MBR Kettle Burners No.1 and No. 4 shall be 20 MMbtu/hr each.

[Rule 62-210.300(PTE), F.A.C., Rule 62-296.700(4), FAC, and Rule 2.1101, JEPB]

A.2. **Hours of Operation**. The hours of operation of each MBR Kettle Burner Nos. 1 and 4 are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

A.3. This permit **does not** change any or establish any of the pollutant emissions standards or testing requirements that are in all of the existing, valid, Department permits.

A.4. The facility is subject to the attached Combined Appendices requirements.

B. EU108- Wallboard Coating Booth (Wallboard Production Line No. 1)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
108	Wallboard Coating Booth (Wallboard Production Line No. 1)

Emission Unit Description: Wallboard Coating Booth Line No.1 for the application of coatings to the finished wallboard produced by the Wallboard Lines Nos. 2 and 3. Particulate Matter will be controlled by panel filters. This EU also includes a Dryer Burners/Kiln for the production of heat for wallboard drying zones.

B.0. **Relation to Other Permits.** The conditions of this permit will supplement and with conditions of all existing, valid, Department permits.
[Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

EQUIPMENT

B.1. **Wallboard Coating Booth**. The permittee is authorized to construct, install and operate (for purposes of testing and unit shakedown) a Wallboard Coating Booth at Wallboard Production Line No. 1 and also install a new associated coating booth stack.

[Application No. 0310072-022-AC]

B.2. **Wallboard Coating Booth**. The design capacity of the Coating Booth is 240 gallons per hour and 62,500 gallons per year.

[Application No. 0310072-022-AC]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

B.3. **Hours of Operation – Coating Booth**. The hours of operation of are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

B.4. **Wallboard Coating Booth**. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b)1, F.A.C.]

TESTING REQUIREMENTS

B.5. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[Rule 62-297, FAC, and Rule 2.1201, JEPB]

B.6. **Wallboard Coating Booth.** VE testing for Wallboard Coating Booth shall be conducted upon request of the Permitting Authority.
[Rule 62-297.310(7), F.A.C.]

B.7. **Test Requirements**. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

[Rule 62-297.310(7)(a)9, F.A.C.]

RECORDS AND REPORTS

B.8. **Test Reports**. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the maximum heat input and capacity.

[Rule 62-297.310(8), F.A.C.]

B.9. The facility is subject to the attached Combined Appendices requirements.