FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. 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. 0310072-024-AC
Permit Expires: **March 3, 2015**

Jacksonville Facility
Air Construction Permit
Wallboard Production Line No. 3

This is the final air construction permit, which authorizes the modification of (EU110) Wallboard Production Line No. 3, to produce a new product using heavier pre-coated glass mat on one side of the wallboard. 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, Florida, 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 3/3/14 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)

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.

Leslie Maybin
(Clerk)

3/3/14
(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

This construction permit is for the modification of (EU110) Wallboard Production Line No. 3, to produce a new product using heavier pre-coated glass mat on one side of the wallboard.

This project will modify the following emissions units.

Facility ID No. 0310072	
ID No.	**Emission Unit Description**
110	Wallboard Production Line No. 3

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.

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.]

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
110	Wallboard Production Line No. 3

Emission Unit 2 Description: Line for the production of wallboard including burners for the production of heat for wallboard drying zones. Additives may be used in the wallboard production process. Glass mats may be substituted for paper in the wallboard production process.

The facility is currently minor for Prevention of Significant Deterioration (PSD) regulations by the establishment of a facility wide emission limit for PM and VOC of less than 250 tons per year each. The facility has established a facility wide emission limit for HAPs of less than 10 tons per year for any single HAP and less than 25 tons per year for total HAPs classifying it as a Synthetic Minor Source of HAPs.

1. **Relation to Other Permits.** The conditions of this permit supplements all other previously issued air construction and operation permits for these emissions units. These conditions are in addition to all other applicable permit conditions and regulatory requirements. The Permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, and the like.

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

EQUIPMENT

2. No actual construction changes will be necessary to (EU110) Wallboard Production Line No. 3, in order produce a new product using heavier pre-coated glass mat on one side of the wallboard.

This construction permit shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

[Application No. 0310072-024-AC]

3. This permit does not change or modify any permitted maximum heat input rates. The maximum heat input to the wall board dryer burners shall be as follows:

Source Description	Maximum Heat Input
EU110 Wallboard Dryers Line No. 3	160 MMBtu/hr

[Permit No. 0310072-015-AC, Rule 62-210.200, FAC, and Rule 2.301, JEPB]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

4. **Hours of Operation**. This EU shall be allowed to operate 8,760 hours per year per each wallboard dryer burner.
[Rule 62-4.070, FAC, and Rule 2.1401, JEPB]

5.a. **Wallboard Production Line Nos. 2 and 3**. Additive use in wallboard production on wallboard production line nos. 2 and 3 shall be limited to a maximum of 1.44 X 10^6 pounds per year total, **standard glass mat (only)** use shall be limited to a maximum of 3.08 X 10^6 pounds per year total as a paper substitute. Year means calendar year.

New product using heavier pre-coated glass mat:

5.b. **Wallboard Production Line No. 3 (Only)**. In the new product which uses heavier pre-coated glass mat additive use shall be limited to a maximum of 1.62 X 10^5 pounds per year total, **standard glass mat** use shall be limited to a maximum of 4.50 X 10^5 pounds per year, and **pre-coated glass** mat use shall be limited to a maximum of 1.53 x 10^6 pounds per year. Year means calendar year.

{Note: While Line No. 3 is using the thicker pre-coated glass mat, it is not using the standard glass mat on both sides of the product.}

[Application No. 0310072-024-AC, additional information submitted on 02/04/2014, Rule 62-212.400(12), FAC, and Rule 2.401, JEPB]

6. **Commencement of Operation.** The permittee shall submit to the Air Compliance Assurance section of this Office written notification of the date of operation of **EU110** as modified**.** This notification shall be submitted or postmarked within as many days prior to the date of operation commencement as practical, but no later than one (1) business day following commencement of construction and operation.

[Rule 62-4.070(3), F.A.C.]

7. The facility is subject to the attached Combined Appendices requirements.