Florida Department of Environmental Protection

Northeast District
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Jacksonville, Florida 32256

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Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

PERMITTEE

Continental Palatka, LLC
886 North Highway 17
Palatka, Florida 32177

Authorized Representative:
Debbie Master, Plant Manager

Air Permit No. 1070039-023-AC
Permit Expires: 01/05/2018
Minor Air Construction Permit

Continental Palatka
Replacement of COMS with Bag Leak Detection System (BLDS) Installation

PROJECT

This is the final air construction permit, which authorizes the replacement of the current Continuous Opacity Monitoring System (COMS) on the Cage Mill Dryer System for EU 002 - Cage Mill Dryer System # 1 – Bag Filter and EU 023 - Cage Mill Dryer System # 2– Bag Filter with a functionally equivalent triboelectric Bag Leak Detection System (BLDS) on each emissions unit. The proposed work will be conducted at the existing Continental Palatka Facility, which is a Synthetic Gypsum Wallboard Forming Facility categorized under Standard Industrial Classification No. 3275. The existing facility is located in Putnam County at 886 North Highway 17 in Palatka, Florida. The UTM coordinates are Zone 17, 438.13 km East and 3290.36 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and 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.

STATEMENT OF BASIS

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.

Julie R. Hudson
Environmental Manager
Air Permitting

FILING AND ACKNOWLEDGEMENT & CERTIFICATE OF SERVICE

Filed on this date pursuant to § 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged. The undersigned hereby certifies that this Construction Permit, Technical Evaluation, Combined Appendices and all copies were 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 January 05, 2017, to the listed persons.

Debbie Master, Plant Manager, Continental Palatka, LLC (debbie.master@continental-bp.com)
James Chavis, Mill Active Storage Supervisor, (james.chavis@continental-bp.com)
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Clerk

January 05, 2017
Date

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No. 1070039			
ID No.	**Emission Unit Description**	**Emissions Point**	**Filter System**
Regulated Emissions Units and associated Emission Points			
001	FGD Surge Bin #1 (55-ton Bin)	01	FGD Surge Bin Filter
002	Cage Mill Dryer System #1	02	Dust Collector
003	Imp Mill Feed Silo A (170-ton Bin)	02, 23	Dust Collector/Bin Filter
004	Imp Mill Flash Calciner System A	04	Dust Collector
005	Imp Mill Air Cooling System A	05	System Collector
006	Stucco Silo A (690-ton Bin)	06	Silo Filter
007	Starch Silo	07	Starch Silo Vent Filter
008	Sawing Systems/Dunnage Machines	16	End Trim Dust Collector
010	Belt Conveyors and Bucket Elevators	Fugitive	None
011	Emergency Live Bottom Feed Hopper	11	BC-9 Nuisance Dust Collector
013	Wallboard Dryer (4 Natural Gas Burners)	13 A, 13 B	None
014	Ball Mills	14	BMA Dust Collector
016	Landplaster Bin	16	End Trim Dust Collector
017	Additives System and Pin Mixer	17	Nuisance Dust Collector
018	Imp Mill Feed Silo B (170-ton Bin)	02, 23	Dust Collector/Bin Filter
019	Imp Mill Flash Calciner System B	19	Dust Collector
020	Imp Mill Cooling System B	20	System Filter
021	Stucco Silo B (690-ton Bin)	21	Silo Filter
022	FGD Surge Bin (55-ton Bin) #2	22	FGD Surge Bin Filter
023	Cage Mill Dryer System #2	23	Dust Collector
024	Reclaim Processing and Screening	24	None
028	Perkins diesel fired emergency generators (219 HP)	28	N/A
029	Perkins diesel fired emergency generators (166 HP)	29	N/A
030	John Deere Water Pump (275 HP)	30	N/A
Unregulated Emissions Units and Activities			
	Paved & unpaved roads (fugitive emissions)		
	Raw material & product storage piles, conveying & handling		
	Wood and metalworking shops		

	Painting operations/paint shop [1]		
	Sandblasting [2]		
	Pipe leaks [3]		
	Packing leaks		
	Unconfined particulate from road dust/ miscellaneous sources		
	Lubricating oil reservoirs		
	Fire training		
	Loading/unloading/storage of packaged materials		
	Lab vents		
	Machine shops		
	Refueling		
	Space heaters		
	General purpose painting		
	Gypsum handling and storage system [4]		
	Limestone handling and storage system [4]		

[1] Not to exceed HAP and VOC rule reporting thresholds.
[2] With the exception of off property drift.
[3] In accordance with manufacturer's specified allowances under normal operation.
[4] Unregulated with the exception of compliance with Title V Permit No. 1070039-018, Facility-Wide Condition No. 3.

PROPOSED PROJECT

Replacement of the current Continuous Opacity Monitoring System (COMS) for EU 002 Cage Mill Dryer System #1 and EU 023 – Cage Mill Dryer System #2 control devices with triboelectric Bag Leak Detection Systems (BLDS).

This project will modify the following emissions units.

Facility ID No. 1070039

ID No.	Emission Unit Description
002	Cage Mill Dryer System # 1 – Bag Filter
023	Cage Mill Dryer System #2– Bag Filter

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not operate** 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 62-213, 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

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Permitting Program, of the Florida Department of Environmental Protection (Department). 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, Permitting Program. The Permitting Authority's telephone number is (904) 256-1700.

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 at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is (904) 256-1700.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D; (Common Testing Requirements), Appendix E; (40 CFR 60 Subpart A General Provisions) and Appendix F; (40 CFR 60, Subpart UUU).

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. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires.

[Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Source Obligation:

a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.

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 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.

c. 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.]

9. 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 and Chapter 62-213, F.A.C.]

EU 002 - Cage Mill Dryer System #1 & EU 023 - Cage Mill Dryer System #2

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description	Emissions Point (ept)
002	Cage Mill Dryer System # 1 – Bag Filter	002 NOTE (1), NOTE (2)
023	Cage Mill Dryer System #2– Bag Filter	023 NOTE (2)

NOTE (1), NOTE (2) EU-003, EU-025 and EU-018 duct to EP-002; limits for these units are listed in Permit No. 1070039-018-AV (Subsection A).

NOTE (2) The Fabric filter's primary purpose is to recover product and return it to the process

Emission Units 002 and 023 Cage Mill Dryer System # 1 and #2, manufactured by ABB Raymond Model No. 3125 with Alstom Power Preheater manufactured by Raymond, September 10 2005. Each dryer is powered by 55MMBTU/hr natural gas fired burners. Particulate matter and visible emissions from each emissions unit are controlled by separate 52,000 dscfm baghouse control systems.

APPLICABILITY OF PREVIOUS PERMITS

1. Relation to Other Permits: The conditions of this permit supplements all other previously issued air construction permits for this emissions unit. 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. Equipment Name: The permittee is authorized to replace each existing Continuous Opacity Monitoring System (COMS) on EU 002 and EU 023 with a functionally equivalent triboelectric Bag Leak Detection System (BLDS). [Application No. 1070039-023-AC]

EMISSIONS STANDARDS

3. Maximum Allowable Emission Rate for each EP: This permit does not add to or modify the existing emissions standard. The permitted maximum allowable emission rate for each cage mill dryer system is as follows:

POLLUTANT	STANDARD/LIMIT	
Particulate Matter	(0.017 gr/dscf) Note (1)	7.58 1bs/hr., 33.19 TPY
Visible Emissions	10% Opacity	

Note (1): Requested by the facility to escape PSD review.

[Permit No. 1070039-011-AC, 40 CFR 60. 732 (a) & (b) & Application No. 1070039-023-AC]

TESTING REQUIREMENTS

4. Initial Compliance Tests BLDS Baseline Determination EU (002) & EU (023): To demonstrate initial compliance with the emissions standards for Particulate Matter (PM) and Visible Emissions (VE) from the control device a concurrent VE Method 9 Test shall be conducted while the BLDS is being calibrated to determine the BLDS measured current 10% opacity limit functional equivalency in order to comply with the VE opacity limit as specified in **Specific Condition No. 3**. The facility shall continue to meet the PM emissions limit as specified by **Specific Condition No. 3**. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3) and 62-297.310(8)(b)1, F.A.C. 40 CFR 60.732(a), (b) & Application No. 1070039-023-AC]

5. Testing Duration Visible Emissions (VE): The minimum observation period of the Method 9 test observation shall be sixty (60) minutes (as incorporated in Chapter 62-297, FAC). [40 CFR 60.736(b)(2) & Application No. 1070039-023-AC]

6. Testing Duration Particulate Matter (PM): The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm. [40 CFR 60.736(b)(1) & Application No. 1070039-023-AC]

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(9), F.A.C.]

8. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

9. Bag Leak Detection System (BLDS) (EU002) & EU (023): The permittee shall Install, calibrate, maintain, and continuously operate the BLDS on each emissions unit control device to measure and record the opacity of the emissions discharged into the atmosphere from each control device as required by **Specific Condition No. 3.** [Rule 62-4.070(3), F.A.C. and 40 CFR 60.734(a) & Permit Application No. 1070039-023-AC]

10. Bag Leak Detection System(BLDS): The bag leak detection system must meet the specifications and requirements of paragraphs (a) through (f) of this Condition.

    a. The permittee shall follow the manufacturer installation guidelines of the BLDS.

b. The BLDS sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)

c. The BLDS must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph (iv) of this Condition, and the alarm must be located such that it can be heard by the appropriate plant personnel.

d. For each BLDS, the permittee shall develop and submit to the permitting authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (a) through (e) of this condition. The monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document ``Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015 September 1997.). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

(1) Installation of the bag leak detection system;
(2) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
(3) Operation of the bag leak detection system including quality assurance procedures;
(4) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and,
(5) How the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).

f. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse

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11. <u>BLDS Corrective Action (EU 002) & (EU 023)</u>: The permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. The cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking the necessary corrective action(s). Corrective actions may include, but are not limited to, the following:

a. Inspecting the baghouse fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions
b. Replacing defective bags or filter media or otherwise repairing the control device;
c. Cleaning the bag leak detection system probe or otherwise repairing the control device;
d. Shutting down the process producing the particulate emissions.

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RECORDS AND REPORTS

12. 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. [Rule 62-297.310(10), F.A.C.]

13. Recordkeeping BLDS: The permittee shall maintain records of the following information:

    a. All records of inspections, cleanings, repair and replacement of BLDS components. Records shall include the date, time, personnel conducting the inspection, condition of each sensor as-found, and a description of any actions taken.
    b. The Operator's Log contains documentation of alarms and resolution of alarm conditions.
    c. Monthly records will be maintained for drift checks and response tests performed, and will be signed by the person conducting the inspection, testing, or maintenance.
    d. Values for the baseline (sensitivity) setting, response time setting, and alarm level(s) and a description of how each was established.

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14. Records: Records of the opacity measurements required in **Specific Condition No. 9** shall be retained for at least 2 years. [Rule 62-4.070(3), F.A.C. and 40 CFR 60.735(a) & Permit Application No. 1070039-023-AC]

15. Exceedances: Each permittee shall submit written reports semiannually of exceedances of control device opacity required to be monitored by **Specific Condition No. 9**. For the purpose of these reports, exceedances are defined as follows:

    All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent.

[40 CFR 60.735(c)(1) & Permit Application No. 1070039-023-AC]

16. Reporting Requirements: The reporting requirements of **Specific Condition No. 15** remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State. [40 CFR 60.735(d) & Permit Application No. 1070039-023-AC]

17. Commencement of Construction and Operation: The permittee shall submit to the Air Compliance Authority of this Office written notification of the date of construction of the BLDS. Notifications shall be submitted within as many days prior to the date of construction as practical, but no later than fifteen (15) business day following commencement of construction and operation. [Rule 62-4.070(3), F.A.C.]