Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Ryan E. Matthews
Interim Secretary

PERMITTEE

Sugar Cane Growers Cooperative of Florida (SCGCF)
1500 West Sugar House Road
Belle Glade, Florida 33430-0666

Authorized Representative:
Jose F. Alvarez, Executive Vice President
C.O.O. and General Manager

Air Permit No. 0990026-039-AC
Permit Expires: December 31, 2018
Minor Air Construction Permit
Glades Sugar House
Bagasse Residue Firing Project

PROJECT

This is the final air construction permit, which authorizes the bagasse residue from the new fiber products plant to be fired in the six existing on-site boilers. The proposed work will be conducted at the existing Glades Sugar House facility, which is a sugarcane mill categorized under Standard Industrial Classification No. 2061. The existing facility is in Palm Beach County at 1500 West Sugar House Road in Belle Glade, Florida. The UTM coordinates are Zone 17, 534.9 kilometers (km) East and 2,953.3 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 Tallahassee, Florida

Syed Arif

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction Permit package 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 the date indicated below to the following persons.

Jose Alvarez, SCGCF (jfalvarez@scgc.org)
Kathy Lockhart, SCGCF (kdlockhart@scgc.org)
David Buff, P.E., Golder Associates, Inc. (dbuff@golder.com)
Air Program Administrator, South District (SouthDistrict@dep.state.fl.us)
Laxmana Tallam, Palm Beach County Health Department (Laxmana.Tallam@flhealth.gov)
Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)

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.

Lynn Scearce 2017.05.11 11:31:58 -04'00'

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No. 0990026	
ID No.	**Emission Unit Description**
001	Boiler No. 1
002	Boiler No. 2
003	Boiler No. 3
004	Boiler No. 4
005	Boiler No. 5
006	Boiler No. 6 (Inactive)
007	Boiler No. 7 (Inactive)
008	Boiler No. 8
009	Spray Booth

PROPOSED PROJECT

On February 9, 2016, SCGCF was issued Air Construction Permit No. 0990026-031-AC. This air construction permit allowed for the construction of a fiber product plant within the existing SCGF site. Construction is currently underway on the new facility, which is expected to startup in spring of 2017. Excess bagasse will be sent to the fiber processing facility. The bagasse will then be treated in a proprietary process, which will cause bagasse residue to be created as a by-product. This project authorizes the burning of bagasse residue from the new fiber products plant in the six existing on-site boilers. The bagasse residue has similar qualities to the current bagasse now fired in the boilers, except for higher ash content (approximately 34 percent by weight, dry basis) and lower volatile matter, sulfur, and fixed carbon.

This project will modify the following emissions units.

Facility ID No. 0990026	
ID No.	**Emission Unit Description**
001	Boiler No. 1
002	Boiler No. 2
003	Boiler No. 3
004	Boiler No. 4
005	Boiler No. 5
008	Boiler No. 8

FACILITY REGULATORY CLASSIFICATION

- The facility is 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 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 Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Department's South District at: 2295 Victoria Avenue, Suite 364, P.O. Box 2549, Fort Myers, Florida 33902-2549. The telephone number for the South District is 239-344-5600.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Palm Beach County Health Department at: 800 Clematis Street, West Palm Beach, Florida 33401. The telephone number for the Health Department is 561-837-5900.

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); and 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. 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.]

A. Mill Boiler Nos. 1 through 5 and 8 (EU Nos. 001-005 and 008)

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
001	Boiler No. 1
002	Boiler No. 2
003	Boiler No. 3
004	Boiler No. 4
005	Boiler No. 5
008	Boiler No. 8

EXISTING PERMIT CONDITIONS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT

2. Boiler Nos. 1 – 8: The permittee is authorized to fire the bagasse residue received from the new fiber processing plant (SCGCF residue) in the sugar mill boilers. The permittee shall meet all applicable requirements when the boilers begin to fire SCGCF residue, while complying with the facility-wide steam cap. [Design, Application No. 0990026-039-AC]

PERFORMANCE RESTRICTIONS

3. Authorized Fuel: The fuels that are allowed to be burned in boilers consist of:

   a. Carbonaceous fuel (bagasse and residue),

   b. No. 6 residual oil,

   c. On-specification used oil,

   d. Non-hazardous waste contaminated soil that is generated on-site, and

   e. SCGCF residue; shall not exceed more than 20% of the total heat input, and 14% of the mass input to each boiler on an annual average basis.

   f. Natural gas.

   [Application No. 0990026-039-AC; Permit Nos. 0990026-015-AC and 0990026-019-AC; and Rule 62-210.200(PTE), F.A.C.]

4. Hours of Operation: These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

5. Steam Production: Total steam production from all boilers shall not exceed 4,492,912,000 pounds per consecutive 12-month period, rolled monthly. The starting month for the 12-month period, rolled monthly steam cap for the Glades Sugar House boilers shall begin March 2016. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0990026-033-AC]

A. Mill Boiler Nos. 1 through 5 and 8 (EU Nos. 001-005 and 008)

EMISSIONS STANDARDS

6. Particulate Matter (PM) Emissions:

   a. *EU001, EU002, EU003, EU005*. PM emissions from each boiler (EU001, EU002, EU003, EU005) shall not exceed 0.25 pounds per million British thermal units (lb/MMBtu) heat input of carbonaceous fuel plus 0.1 lb/MMBtu heat input of fossil fuel for each boiler. [Permit No. AC50-42476\PSD-FL-077]

   b. *EU004*. PM emissions from EU004 shall not exceed 0.20 lb/MMBtu of heat input of carbonaceous fuel plus 0.1 lb/MMBtu heat input of fossil fuel. [Permit Nos. AO50-2334 and 0990026-015-AC]

   c. *EU008*. PM emissions from EU008 shall not exceed 0.137 lb/MMBtu of heat input of carbonaceous fuel plus 0.1 lb/MMBtu heat input of fossil fuel, 75.6 pounds per hour, and 276 tons per year (TPY). [Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A; and, Rule 62-212.400(BACT), F.A.C.]

   d. In addition to the above limits, after January 30, 2016, filterable PM emissions from each boiler shall not exceed 0.44 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]

7. Carbon Monoxide (CO) Emissions: CO emissions from each boiler shall not exceed shall not exceed 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Table 2 to Subpart DDDDD of 40 CFR 63]

8. Volatile Organic Compound (VOC) Emissions:

   a. *EU001, EU002, EU003, EU004, EU005*. VOC emissions from each boiler shall not exceed 0.7 lb/MMBtu heat input. [Permit No. 0990026-015-AC]

   b. *EU008*. VOC emissions from EU 008 shall not exceed 123 pounds per hour and 449 TPY. VOC emissions shall be maintained at the lowest possible level through good combustion control. [Permit No. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981; and Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A]

TESTING REQUIREMENTS

9. Initial Compliance Tests: Emissions of PM, CO and VOC shall be tested on Boiler Nos. 3 through 5 and 8 and on the first available boiler from Boiler Nos. 1 or 2, during normal operations while firing the SCGCF residue at approximately 20% of the total heat input on an hourly basis. The test data shall be used to provide an emission factor for the SCGCF residue on PM, CO and VOC to demonstrate compliance with **Specific Condition 12**. The initial compliance tests may be conducted in conjunction with the upcoming annual stack tests.

   {Permitting Note: Based on the application, the average higher heating value of the untreated bagasse is 8,356 BTU/lb, dry basis with an average heat content of 16 MMBtu/ton. The SCGCF residue attains an average higher heating value of 5,829 Btu/lb, dry basis or 2,915 Btu/lb at 50% moisture, the heat input due to SCGCF residue is calculated to be 54 MMBtu/hour.}

   [Rules 62-4.070(3), F.A.C.; and Application No. 0990026-039-AC]

10. 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.]

11. 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	Determination of Particulate Emissions from Stationary Sources

Method	Description of Method and Comments
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25	Determination of Total Gaseous Non-Methane Organic Emissions as Carbon
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

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]

{*Permitting Note: If EPA Method 25A is employed, EPA Method 18 may be used to quantify and subtract the methane fraction in the exhaust gases.}*

RECORDS AND REPORTS

12. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

    a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons/year on a calendar year basis, for a period of 5-years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

    b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

        (1) The name, address and telephone number of the owner or operator of the major stationary source;

        (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

        (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

        (4) Any other information that the owner or operator wishes to include in the report.

    c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

    d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual PM, CO and VOC emissions for each Boiler Nos. 1 – 5 and 8:

        (1) The permittee shall use the heat input rates of Boiler Nos. 1 – 5 and 8 and the emission factors established from **Specific Condition 9** to determine and report the actual annual emissions of PM, CO and VOC for Boiler Nos. 1 – 5 and 8.

        (2) Unless otherwise approved by the Department, the permittee shall use the emission factors provided in Table 4-2 of the application when firing untreated bagasse, natural gas, No. 6 fuel oil and waste oil if used during testing.

{Permitting Note: Table 4-2 is on page 28 of 75, contained in the response for the request for additional information.}

(3) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

{Permitting Note: Baseline emissions of CO, PM and VOC were determined by the applicant to be 6,773 TPY, 339.8 TPY and 423.3 TPY, respectively. The Demand Growth Excluded emissions of CO, PM and VOC were determined by the applicant to be 1,959 TPY, 93.6 TPY and 119.8 TPY, respectively. Future evaluations of project emission increases will be evaluated by the Department on a case-by-case basis.}

[Application 0990026-039-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

13. 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 test report shall also contain the heat input rates, percentage of the fuels fired (mass and heat input basis), steam production rate, and calculated boiler efficiency. [Rule 62-297.310(10), F.A.C.]