Sugar Cane Growers Cooperative of Florida
Glades Sugar House
Facility ID No. 0990026
Palm Beach County

Title V Air Operation Permit Revision

Permit No. 0990026-0~~49~~52-AV
(~~1st~~ 2nd Revision of Title V Air Operating Permit No. 0990026-047-AV)

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Permit Review Section
2600 Blair Stone Road
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Tallahassee, Florida 32399-2400

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800 Clematis Street
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Section **Page Number**

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PERMITTEE:
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1500 George Wedgworth Way,
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Permit No. 0990026-052-AV
Glades Sugar House
Facility ID No. 0990026
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility to remove the co-located Tellus fiber processing facility to reflect that the facility is a separate source as a result of operational changes made in September 2024. The existing Glades Sugar House facility is in Palm Beach County at 1500 George Wedgworth Way, Belle Glade, Florida. The UTM coordinates of the existing facility are Zone 17, 534.9 km East, and 2,953.3 km North.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above-named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0990026-049-AV Effective Date: September 27, 2022
0990026-047-AV Effective date: October 14, 2021
0990026-052-AV Effective date: Month, Day, 2025
Renewal Application Due Date: March 3, 2026
Expiration Date: October 14, 2026

(Proposed)

David Lyle Read, P.E., Environmental Administrator
Permit Review Section
Division of Air Resource Management

DLR/srl

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility consists of a sugar mill, a boiling house, and a fiber products plant. During the crop season, harvested cane is crushed, and the juice is extracted in the processing mill. The raw juice goes through a series of process units, which include heaters, clarifiers, evaporators, vacuum pans, crystallizers and centrifuges, to produce two products, raw sugar and molasses. All of the bagasse is delivered to either the boilers for fuel~~,~~ or to bagasse storage piles for future use~~, or to the fiber processing facility, where it is treated with non-hazardous proprietary chemicals and small amounts of steam generated by a small natural gas-fired boiler. Bagasse sent to the fiber products operation is formed into bales at the sugar mill and then transported by truck to the fiber processing operation. The final bagasse fiber goes to a molding process with a secondary stream of materials (SCGCF residue) being used as a fuel for the on-site bagasse-fired boilers~~.

A separate fiber products plant owned and operated by Tellus and originally designed to use depithed bagasse from Glades Sugar House to produce fiber products is located onsite. The bagasse would be processed into pulp before being used to manufacture fiber products. The facility is currently not able to use bagasse from Glades Sugar House and is currently obtaining pulp offsite. The Tellus facility and Glades Sugar House are two separate facilities for Title V and PSD permitting purposes. The Tellus facility is ~~utilizing up to 90 oven-dried tons per day (ODTPD) of bagasse, resulting up~~ designed to produce 30.5 ODTPD of molded bagasse fiber products, such as plates, and operates year-round ~~is operating year-around~~.

The facility operates on steam produced from six boilers. The boilers are hybrid suspension grate boilers. The total steam generating capacity of all six boilers is 1,207,854 pounds per hour (lb/hour) when the six boilers operate at rated capacity. However, as authorized in air construction permit No. 0990026-046-AC, the boilers have an annual cap on steam production of 4,900,000,000 pounds of steam based on a 12-month cap of the monthly moving 12-month averages, rolled monthly. The operation of the SCGCF boilers is not limited to the sugarcane harvesting crop season; all boilers may operate year around, as long as the facility-wide steam production cap is not exceeded.

The boilers are capable of burning carbonaceous fuel (bagasse and SCGCF residue), fuel oil, small quantities of on-spec used oil and Boilers Nos. 1, 2, 4, 5 and 8 are also authorized to burn natural gas. The boilers are equipped with dust collectors and wet scrubbers to control particulate matter (PM) emissions (see Section 3 for emission control descriptions). There is also a painting facility (paint booth)~~, an emergency generator used to drive a fire pump, and a natural gas fired hot water heater used to heat water for cleaning bagasse residue~~. The facility has miscellaneous insignificant emissions units and/or activities.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Boiler No. 1
002	Boiler No. 2
003	Boiler No. 3
004	Boiler No. 4
005	Boiler No. 5
008	Boiler No. 8
009	Spray Booth
~~010~~	~~Bagasse Processing and Fiber Products Operation~~
~~011~~	~~Natural Gas Fired Boiler "A" 5.2 MMBtu/hr~~

~~012~~	~~New Emergency SI RICE 636HP~~
~~013~~	~~Natural Gas-Fired Boiler "C" 28 MMBtu/hr~~
~~015~~	~~Hot Water Heater 1.89 MMBtu/hr~~
Unregulated Emissions Units	
014	H_2S Degasifier Vents for Well Water

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received ~~April 12, 2021~~ November 26, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
62-4.160	001, 002, 003, 004, 005, 008, 009~~, 010, 015~~
62-4.050	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 013, 015~~
62-4.030	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-297.310	001, 002, 003, 004, 005, 008~~, 010, 011, 012, 013, 015~~
62-296.570	001, 002, 003, 004, 005, 008
62-296.410	001, 002, 003, 004, 005, 008
62-296.320	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-213.440	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-213.430	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-213.420	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-213.410	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-213.205	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-210.370	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 012, 013, 015~~
62-210.300	001, 002, 003, 004, 005, 008, 009~~, 010, 011, 013, 015~~
40 CFR 64	001, 002, 003, 004, 005, 008
~~40 CFR 60 Subpart A~~	~~012~~
~~40 CFR 60 Subpart JJJJ~~	~~012~~
40 CFR 63 Subpart A	001, 002, 003, 004, 005, 008~~, 011, 013, 015~~
40 CFR 63 Subpart DDDDD	001, 002, 003, 004, 005, 008~~, 011, 013, 015~~

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The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents 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.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. 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. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

{Permitting Note: The above emission limiting standard applies to emissions units of particulate matter not subject to a particulate emission limit or opacity limit set forth in or established this permit or in Rule 62-296, F.A.C.}

FW5. Unconfined Particulate Matter. 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 particulate matter at this facility include:

a. The use of covered conveyors on the bagasse fuel handling systems.
b. The use of enclosed material transfer points where feasible.
c. Minimization of the distance bagasse fuel is dropped during handling.
d. The use of windbreaks around the material handling equipment.
e. Daily removal of any dust forming material spilled within the area.
f. The use of water to control boiler ash dust during disposal.
g. Maintenance of paved areas as needed.
h. The use of baghouses (7) to control fugitive particulate matter emissions from the bagasse conveying system.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received April 12, 2021]

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details and requirements.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each

Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: https://floridadep.gov/air/permitting-compliance/content/title-v-fees. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the U.S. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective (See also Appendix RR, Conditions RR1 and RR7.). The annual statement of compliance can be submitted to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) on EPA's Central Data Exchange (CDX) at https://cdx.epa.gov/. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112 (r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW9. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19(d), 40 CFR 61.10(h) & 40 CFR 63.10(a)(5)]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.

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The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
001	**Boiler No. 1** is a boiler with a water cooled, pin-hole grate. The boiler has two (2) oil burners rated at 39.6 MMBtu/hr each and two (2) natural gas burners rated at 60 MMBtu/hr each. The boiler produces steam for use in the production of raw sugar. Emissions control equipment includes a multiple cyclone dust collector and an impingement type wet scrubber. The stack on the scrubber is 150 feet high, has an exit diameter of 7.0 feet and approximately 32% water vapor. (The boiler's existing tube and tile design waterwalls have been replaced with membrane style panels in accordance with air construction permit No. 0990026-020-AC. This includes side, front and roof panels). The boiler is a hybrid suspension grate boiler, and is fired by bagasse, SCGCF residue, fuel oil, and natural gas.
002	**Boiler No. 2** is a boiler with a water cooled, pin-hole grate. This boiler has two (2) oil burners rated at 39.6 MMBtu/hr each, and two (2) natural gas burners rated at 60 MMBtu/hr each. The boiler produces steam for use in the production of raw sugar. Emissions control equipment includes a multiple cyclone dust collector and an impingement type wet scrubber. The stack on the scrubber is 150 feet high, has an exit diameter of 7.0 feet and approximately 26% water vapor. (The boiler's existing tube and tile design waterwalls have been replaced with membrane style panels in accordance with air construction permit No. 0990026-020-AC. This includes side, front and roof panels). The boiler is a hybrid suspension grate boiler, and is fired by bagasse, SCGCF residue, fuel oil, and natural gas.
003	**Boiler No. 3** is a boiler with a water cooled, pin-hole grate. This boiler has two (2) oil burners rated at 29.0 MMBtu/hr each. The boiler produces steam for use in the production of raw sugar. Control equipment includes an impingement type wet scrubber. The stack on the scrubber is 180 feet high, has an exit diameter of 7.0 feet and approximately 27% water vapor. This is a hybrid suspension grate boiler that has a water-cooled, pin-hole grate, and is fired by bagasse, SCGCF residue, and fuel oil.
004	**Boiler No. 4** is a boiler with a traveling grate. This boiler has (1) one oil burner rated at 108.6 and two (2) natural gas burners rated at 138 MMBtu/hr each. The boiler produces steam for use in the production of raw sugar. Control equipment includes a multiple cyclone dust collector and two (2) impingement type wet scrubbers. Both wet scrubbers exhaust to a single stack that is 180 feet high, has an exit diameter of 9.5 feet and approximately 32% water vapor. This is a hybrid suspension grate boiler that has a traveling grate and is fired by bagasse, SCGCF residue, fuel oil, and natural gas.
005	**Boiler No. 5** is a boiler with a traveling grate. This boiler has one (1) oil burner rated at 66.5 and two (2) natural gas burners rated at 83 MMBtu/hr each. The boiler produces steam for use in the production of raw sugar. Control equipment includes a multiple cyclone dust collector and two (2) impingement type wet scrubbers. Both wet scrubbers exhaust to a single stack that is 150 feet high, has an exit diameter of 7.0 feet and approximately 26% water vapor. The boiler is a hybrid suspension grate boiler, and is fired by bagasse, SCGCF residue, fuel oil, and natural gas.

{Permitting Note(s): These emissions units are regulated under: Rule 62-210.200, F.A.C. (Potential to Emit); Rule 62-213.440(1)(b), F.A.C. (Periodic Monitoring); Rule 62-296.570, F.A.C. (Reasonably Available Control Technology for NO_X and VOC); Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment); 40 CFR 64 (Compliance Assurance Monitoring); 40 CFR 63 Subpart A (General Provisions); and, 40 CFR 63 Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial,

Commercial, and Institutional Boilers and Process Heaters). The boilers must comply with Subpart DDDDD regulations.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Steam Production for TESTING (only). The maximum permitted capacity for the operating steam production rate at 400 psig and 585 ºF (or thermodynamically equivalent) and which are to be used to establish a 100% load for testing purposes is as follows:

EU No.	Steam Production Rate (lbs/hr)	Averaging Period
001	139,700	24 hour
002	138,154	24 hour
003	110,000	8 hour
004	300,000	24 hour
005	230,000	24 hour

[Rules 62-4.160(2), 62-204.800 & 62-210.200(PTE); and, Permit No. 0990026-015-AC]

A.2. Methods of Operation. The fuels that are allowed to be burned in these units are:

a. Carbonaceous fuel (bagasse ~~and SCGCF residue~~),
b. No. 6 residual oil,
c. Small quantities of on-specification used oil,
d. Small quantities of 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.

[Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0990026-015-AC, 019-AC, 027-AC & 039-AC]

*{Permitting Note: Permit No. 0990026-019-AC authorized the firing of natural gas; however, the facility did not install natural gas fired burners to Boiler No. 3 prior to the expiration date of Permit No. 0990026-019-AC. In addition, on-specification used oil is as defined in 40 CFR 279.11, Subpart B. ***Note:** Used oil containing more than 1,000 ppm but less than 4,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such oil shall not be burned unless the owner or operator demonstrates through the use of DEP approved analytical methods that the used oil does not constitute a hazardous waste.}*

A.3. Hours of Operation. These emission units may operate continuously (8,760 hours/year). [Permit No. 0990026-039-AC, Specific Condition A.4.]

{Permitting Note: The normal crop season typically consists of up to 180 operating days from October to April.}

A.4. Steam Production "CAP". The total steam production from all boilers (Nos. 1, 2, 3, 4, 5 & 8) shall not exceed 4,900,000,000 pounds of steam based on a 12-month cap of the monthly moving 12-month averages, rolled monthly. [Permit Nos. 0990026-039-AC, Specific Condition A.5., & 0990026-046-AC, Specific Condition 3.A.3.]

A.5. Method for compliance with the steam cap. Compliance with the steam cap shall be based on a "12-month cap of the monthly moving 12-month averages, rolled monthly" utilizing Equations 1 and 2 given below.

$CD_M = \sum_{i=1}^{12} MA_{M_i}$	Equation 1
$MA_M = {\left[\sum_{i=1}^{12} SP_{M_i}\right]}/{12}$	Equation 2

Where:

CD_M means the monthly steam cap compliance demonstration for a given 12-month period and represents the sum of the calculated 12-month moving averages.

MA_M means the 12-month moving average monthly steam production over a given 12-month period.

SP_M means actual total steam produced for all six boilers in a given month.

[Permit No. 0990026-046-AC, Specific Condition 3.A.4]

A.6. Steam correction factors. The permittee is allowed to apply steam correction factors to the recorded steam production values based upon the manufacturer's provided steam correction factors. The permittee can program the steam correction into their data system to correct the every-5-second data. [Permit No. 0990026-046-AC, Specific Condition 3.A.5]

A.7. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

A.8. Water Meters. The owner or operator shall maintain water flow meters just prior to each individual scrubber associated with Boilers No. 4 and No. 5. Each of the two (2) scrubbers for Boiler 4 and each of the two (2) scrubbers for Boiler 5 shall be equipped with its own water flow meter. The water flow rate to each individual scrubber shall be continuously measured. [Permit No. 0990026-015-AC]

{Permitting Note: Boilers No. 1, No. 2 and No. 3 each have only one scrubber that is equipped with a continuously measuring water flow meter.}

Emissions Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **A.9.-A.16.** are based on the specified averaging time of the applicable test method.

A.9. Visible Emissions (VE). VE from each boiler shall not exceed Number 1.5 on the Ringelmann Chart (30% opacity) except that a density of Ringelmann Number 2 (40 percent opacity) is permissible for not more than two minutes in any one hour. [Rule 62-296.410(1)(b)1., F.A.C.; and, Permit No. 0990026-011-AC]

A.10. Nitrogen Oxides (NO_X) Emissions. NO_x emissions from each boiler shall not exceed 0.45 lbs/MMBtu heat input when burning bagasse. [Permit No. 0990026-015-AC]

A.11. Particulate Matter (PM) Emissions.

a. *EU001, EU002, EU003, EU005.* PM emissions from each boiler (EU001, EU002, EU003, EU005) shall not exceed 0.25 lb/MMBtu heat input of carbonaceous fuel plus 0.1 lb/MMBtu heat input of fossil fuel for each boiler. [Permit Nos. AC50-42476\PSD-FL-077 (Final Determination Dated 10/28/81) & 0990026-015-AC]

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 for each boiler. [Permit Nos. AO50-2334, 0990026-011-AC & 0990026-015-AC]

c. In addition to the above limits, after January 30, 2016, filterable PM emissions from each boiler shall not exceed 0.44 lb/MMBtu of heat input or Total Selected Metals shall not exceed 4.5E-4 lb/MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

A.12. Volatile Organic Compounds (VOC) Emissions. VOC emissions from each boiler shall not exceed 0.7 lb/MMBtu heat input. [Permit No. 0990026-015-AC]

A.13. Sulfur Dioxide (SO_2). The total SO_2 emissions for all boilers combined (EU001, EU002, EU003, EU004, EU005 and EU008) shall not exceed 14 tons per day (TPD). [Permit Nos. AC50-42476/PSD-FL-077 & 0990026-011-AC]

A.14. CO Emissions. CO emissions from each boiler 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].

A.15. Hydrogen chloride. HCl emissions shall not exceed 2.2E-02 lb/MMBtu of heat input (0.022 lb/MMBtu). On and after October 6, 2025, HCl emissions shall not exceed 2.0E-02 lb/MMBtu of heat input. [40 CFR 63.7500(a)(1), Table 2, & Table 15 to Subpart DDDDD of 40 CFR 63].

A.16. Mercury. Mercury emissions shall not exceed 5.7E-06 lb/MMBtu of heat input. On and after October 6, 2025, Hg emissions shall not exceed 5.4E-06 lb/MMBtu of heat input. [40 CFR 63.7500(a)(1), Table 2, & Table 15 to Subpart DDDDD of 40 CFR 63].

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.17. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two (2) hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Permit Nos. 0990026-015-AC & 0990026-019-AC]

A.18. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.; and, Permit Nos. 0990026-015-AC & 0990026-019-AC]

A.19. Reporting of Excess Emissions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.; and, Permit Nos. 0990026-015-AC & 0990026-019-AC]

Monitoring of Operations

A.20. Monitoring of Operations.

a. *Fuel Monitoring.* Instruments shall be installed and maintained to continuously measure the total amount of fuel oil used by boilers 1 through 5, and the total amount of SCGCF residue and natural gas used in all boilers (EU001, EU002, EU003, EU004, EU005 and EU008). Bagasse consumption shall be calculated from steam consumption. The records of fuel oil, natural gas, SCGCF residue, and bagasse usage will be kept by the company, available for regulatory agency inspection for five years. [Permit Nos. 0990026-017-AC (PSD-FL-077B/PSD-FL-213A), & 0990026-027-AC.]

b. The permittee shall conduct a tune-up of the boilers annually, as specified in §63.7540, as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63; and, Permit No. 0990026-027-AC].

c. For each scrubber, the permittee shall maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation, pursuant to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD. [Table 4 to Subpart DDDDD of 40 CFR 63; and, Permit No. 099026-027-AC]

d. The permittee shall comply with the monitoring, installation, operation, and maintenance requirements in 40 CFR 63.7525. [Permit No. 0990026-027-AC]

e. Flue Gas Oxygen or CO_2 Monitor. This emissions units shall be equipped with an operational flue gas oxygen or CO_2 monitor. The emissions units shall have installed an oxygen analyzer system meeting the requirements of 40 CFR 63, Subpart DDDDD. [Permit No. AC50-42476\PSD-FL-077 & BACT dated 10/28/1981; Permit No. AC50-250421/PSD-FL-213 & BACT dated June 3, 1996; and, Permit No. 0990026-027-AC]

f. Within 10 days following each calendar month, the permittee shall calculate and record the total steam production from the boilers for the month and the new 12-month total steam production. [Rule 62-213.440(1)(b), F.A.C.; and, Permit Nos. 0990026-027-AC & 0990026-033-AC.]

A.21. Steam Production. The permittee shall monitor and record the daily steam production rates of the sugar mill boilers (24- hour block total, 8:00 a.m. to 8:00 a.m.) for each day of operation. [Rule 62-213.440(1)(b), F.A.C.]

A.22. Scrubber Monitoring Equipment. Each scrubber control system shall be equipped with instrumentation to monitor total pressure drop of the flue gas stream across each scrubber and the total water flow to each scrubber. Such instrumentation shall be properly maintained so as to be functional at all times. [Permit No. 0990026-015-AC]

{Permitting Note: Pressure drop, and total water flow monitoring required for Compliance Assurance Monitoring Plan. See CAM Plan in Appendix CAM for monitoring requirements.}

A.23. CAM Plan. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(c), F.A.C. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and, 40 CFR 64]

Test Methods and Procedures

A.24. 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
7	Determination of Nitrogen Oxide Emissions from Stationary Sources
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources (Continuous Sampling)
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)
26	Method for determining Hydrogen Chloride (HCl)
26A	Method for Determination of Hydrogen Halide and Halogen Emissions
29	Method for Determination of Metals Emission from Stationary Sources
30A	Method for Determination of Total Vapor Phase Mercury Emissions
101	Method for Determination of Particulate and Gaseous Mercury Emissions

The above methods are described in 40 CFR 60, Appendix A, and 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. [Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60; and, Permit Nos. 0990026-011-AC, 0990026-015-AC & 0990026-039-AC]

A.25. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310(9), F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

A.26. Annual Compliance Tests Required. During each calendar year (January 1 to December 31), these emissions units (EU001, EU002, EU003, EU004, and EU005) shall be tested to demonstrate compliance with the emissions standards for **CO, HCl, Mercury, VE, PM, NO_X,** and **VOC**.

The permitted steam production rates shall not be exceeded during annual testing. Operating rate during testing shall comply with Rule 62-297.310(2), F.A.C. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rules 62-297.310(2) & 62-297.310(7), F.A.C.; 40 CFR 63.7515; and, Permit Nos. 0990026-011-AC, 0990026-019-AC & 0990026-020-AC]

{Permitting Notes: a) A reduced test frequency of once every three (3) years is allowed per MACT for CO, PM, HCl and Hg if two (2) years of test data are <75% of the standard; b) 40 CFR 63 Subpart DDDDD allows fuel analysis to be used as an alternative to performance testing. Therefore, the permittee may comply with the emission limits for HCl and mercury through the fuel analysis, according to 40 CFR 63 Subpart DDDDD. See Appendix Alternate Sampling Procedure (ASP) for fuel sampling (ASP 15-11-AP issued by FDEP on 12/11/15).}

A.27. Compliance Tests Prior To Renewal. Compliance tests shall be performed for emission units EU001, EU002, EU003, EU004 and EU005 for **CO, HCl, Mercury, VE, PM, NO_X,** and **VOC** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance. [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

{Permitting Note: The permittee may comply with the emission limits for HCl and mercury through fuel analysis, according to 40 CFR 63 Subpart DDDDD.}

A.28. VOC Testing. The test method for VOC shall be EPA Method 25 or EPA Method 25A modified to incorporate a sample dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. If EPA Method 25A is employed, EPA Method 18 may be used to quantify and subtract the methane fraction in the exhaust gases. Each test run shall be conducted in accordance with Appendix NSPS, 40 CFR 60, Subpart A, using the method specified. [Permit No. 0990026-011-AC]

A.29. NO_X Test Method. The test method for NO_X shall be EPA Method 7 or 7E. Each test run shall be conducted in accordance with Appendix NSPS, 40 CFR 60, Subpart A, using the method specified. [Permit No. 0990026-011-AC]

A.30. Carbon Monoxide. CO emissions testing shall be conducted in accordance with EPA Method 10 as published in Appendix NSPS, 40 CFR 60, Subpart A, or State approved equivalent method. [Permit No. 0990026-020-AC]

A.31. PM Test Methods. Compliance for PM emissions shall be determined using EPA Methods 1, 2, 3, 4, and 5 in accordance with Appendix NSPS, 40 CFR 60, Subpart A. Emissions units incorporating a scrubber for control of particulate matter shall use an acetone wash. [Permit No. 0990026-011-AC]

A.32. Computing Emissions to Determine Compliance. Compliance with the NO_X, PM and VOC emission limits shall be determined by computing the heat input from the steam output (lb/hr) and the net steam enthalpy. Thermal efficiency while burning bagasse shall be assumed to be 55 percent. Thermal efficiency while burning fuel oil shall be assumed to be 62.5 percent. [Permit No. 0990026-011-AC]

{Permitting Notes: Compliance with the PM emission limit in Condition ***A.11.c.****, and the CO, HCl and mercury emission limits, shall be demonstrated according to the requirements of 40 CFR 63, Subpart DDDDD.*

The permittee may comply with the emission limits for HCl and mercury through fuel analysis, according to 40 CFR 63 Subpart DDDDD.}

A.33. VE Test Methods. All visible emissions tests performed pursuant to the requirements of this subsection shall comply with the following provisions:
a. *Test Method*. The test method for visible emissions shall be EPA Method 9.
b. *Test Procedures*. The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
c. *Test Period*. The required minimum period of observation for an EPA Method 9 compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.
[Permit No. 0990026-015-AC]

A.34. Fuel Oil Sulfur Content Compliance Demonstration. Compliance with fuel oil sulfur limits may be determined based on either:
a. *Vendor Certification.* Certification from the fuel supplier, where the fuel supplier certification shall include the following information:
(1) The name of the oil supplier; and
(2) A statement from the oil supplier listing the actual sulfur content of the oil and the place where the sample was collected, or
b. *Fuel Analysis*. Based on analysis by one of the following methods: ASTM Method D129-91, D1552, D2622-94, D4294-90, or comparable Department approved method.
[Permit No. 0990026-011-AC.]

A.35. Combined Plumes, Alternate Method for Stack Opacity. It is possible that combined plumes from adjacent boilers will prevent a reliable determination of compliance with the opacity standard. If the permittee is unable to perform the scheduled annual visible emissions test because of combined plumes, the permittee shall record the scrubber pressure drop and the water flow rate during each test run for particulate matter (PM) at 15-minute intervals. The test report shall note the attempt to perform the annual visible emissions test, the reason for not being able to complete the test and shall identify scrubber pressure drops and water flow rates recorded during each test run for particulate matter (PM). [Permit No. 0990026-015-AC]

Recordkeeping and Reporting Requirements

A.36. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.37. Reporting of Steam Production Exceedances. Any exceedance of the limitation in Specific Condition **A.4.** shall be reported to the Department within one business day after the discovery of the exceedance. [Permit Nos. AC50-42467/PSD-FL-077, 0990026-011-AC & 0990026-033-AC]

A.38. Fuel Sulfur Content Recordkeeping. Records of the percent (%) sulfur content of all fuel oil burned, and the quantities of fuel oil burned shall be kept. The basis of these records of sulfur content shall be either as-shipped analysis from the vendor, analysis of shipments by the permittee, or in the case of on-site blending, analysis of a fuel sample from the fuel storage tanks each time a shipment of fuel is received. [Permit No. 0990026-011-AC & 0990026-033-AC]

A.39. Steam Flow Recordkeeping. A record shall be kept of each boilers' hours of operation and the steam flow to determine the heat input for the purpose of compliance with the emission limits for NO_X, PM and VOC. **[**Permit No. 0990026-011-AC**]**

A.40. Fuel Recordkeeping. The records of fuel oil, SCGCF residue, on-spec used oil, natural gas and bagasse shall be kept by the owner or operator, available for Department inspection for five years. [Permit Nos. AC 50-42476/PSD-FL-077, 0990026-011-AC, 0990026-017-AC (PSD-FL-077B/PSD-FL-213A) & 0990026-019-AC.]

A.41. CAM Recordkeeping and Reporting. For these emissions units, the owner or operator shall record, maintain and report all monitoring, other activities and reporting in accordance with the requirements in Appendix CAM, and 40 CFR 64 (Compliance Assurance Monitoring). (See also Specific Condition **A.23.**) [Rule 62-4.070(3), F.A.C.; 40 CFR 64]

A.42. Test Reports. Submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-Wide Testing Requirements). For each test report, the report shall also indicate heat input calculations, enthalpy calculations, emission calculations and the actual (metered) amount of fuel oil or natural gas used during testing. [Rule 62-297.310(10), F.A.C.; and, Permit No. 0990026-020-AC]

A.43. Maintenance Records and Reports.

a. *Recordkeeping.* The permittee shall maintain a log on-site to record the date of major components replaced, the manufacturer, model number, and serial number of the new component and the component that was replaced. Major components of a boiler include: furnace/convection pass; steam drum; lower drum; waterwall tubing; superheater; economizer; air preheaters; fuel feed grates; supplemental fuel burners; and forced/induced draft fans. If the manufacturer, model and serial number of the new or replaced components are not available, the log shall include a brief description of the "like-kind" components that were replaced. The log shall also include the dates and the description of any maintenance and repairs made to the boilers and any equipment as described above during each annual seasonal shutdown. All records related to any maintenance, repairs, replacement activities, and any testing shall be maintained on-site for 5-years and made available to the Department upon request.

b. *Report.* Within 60 days of beginning the cane milling season, the permittee shall submit a report to the compliance authority that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off-season maintenance inspections; and a summary of maintenance and repair activities for the next off season.

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

A.44. ~~Actual Emissions Reporting. Permit No. 0990026-039-AC 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 TV 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 TV 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 TV of this permit. For the project approved in Permit No. 0990026-039-AC, the permittee shall use the following methods in reporting the actual annual PM, CO and VOC emissions~~

~~for each Boiler Nos. 1 – 5.~~

~~(1) *For calculating the Actual Emissions from Project No. 0990026-039-AC only:* The permittee shall use the heat input rates of Boiler Nos. 1 – 5 and the emission factors established from **Specific Condition A.9 of Permit No. 0990026-039-AC** to determine and report the actual annual emissions of PM, CO and VOC for Boiler Nos. 1 – 5.~~

~~(2) Unless otherwise approved by the Department, the permittee shall use the emission factors provided in Table 4-2 of the application dated 11/15/2016 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 for Application No. 0990026-039-AC.}*~~

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

~~[Rules 62-212.300(1)(e) & 62-210.370, F.A.C.; and, Permit Nos. 0990026-019-AC, 0990026-020-AC & 0990026-039-AC]~~

~~*Baseline emissions for Project No. 0990026-039-AC of CO, PM and VOC were determined by the applicant to be 6,773 TPY, 339.8 TPY and 423.3 TPY, respectively, for EU Nos. 001-005 & 008 (combined). 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, for EU Nos. 001-005 & 008 (combined). Future evaluations of project emission increases will be evaluated by the Department on a case-by-case basis.}*~~

Other Requirements

A.45. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the requirements contained in 40 CFR 64 – Compliance Assurance Monitoring, 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (See Appendix NESHAP - 40 CFR 63, Subpart DDDDD), and all subsequent final revisions of these subparts. [Rule 62-213.440, F.A.C.]

A.46. CAM Plan. The permittee shall comply with the CAM plan for these emissions units. The indicator range for the CAM Plan is defined as the lowest test-run average pressure drop and liquid flow rate measured during the most recent annual PM performance test. The 30-day rolling average shall be used as the averaging period to satisfy CAM for the boilers. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and, 40 CFR 64]

{Permitting Note: Specific monitoring requirements related to each emissions unit are contained in Appendix CAM.}

Table of Contents

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
008	**Boiler No. 8** is a boiler with a traveling grate. The boiler has one (1) oil burner rated at 97.2 MMBtu/hour and two (2) natural gas burners rated at 138 MMBtu/hour each. Operational controls limit the total natural gas firing to 250 MMBtu/hr. The boiler produces steam for use in the production of raw sugar. Control equipment includes a multiple cyclone dust collector and two impingement type wet scrubbers. The stack on the scrubber is 155 feet high, has an exit diameter of 9.5 feet and approximately 24% water vapor. This is a hybrid suspension grate boiler that has a travelling grate and is fired by bagasse, fuel oil, and natural gas.

{Permitting Notes: This emission unit is regulated under Rule 62-210.200, F.A.C. (Potential to Emit); Rule 62-213.440(1)(b), F.A.C. (Periodic Monitoring); Rule 62-296.570, F.A.C. (Reasonably Available Control Technology for NO_x and VOC); Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment); Rule 62-212.400, F.A.C. [Prevention of Significant Deterioration (PSD) and Best Achievable Control Technology (BACT)], 40 CFR 63 Subpart A (General Provisions); and, 40 CFR 63 Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters).

Essential Potential to Emit (PTE) Parameters

B.1. The allowable operation parameters for Boiler No. 8 are summarized in the following table:

Steam Pressure (psig)	Steam Temperature (°F)	Fuel Burned	Steam Production (lb/hr)	Heat Input (MMBtu/hr)	Amount of Fuel Consumed (lb/hr)
400	585	Bagasse	290,000	553.6(a)	69,200 (a)
600	740	Bagasse	265,943	553.6(a)	69,200 (a)
400	740	Bagasse	263,636	553.6(a)	69,200 (a)

(a) Based upon 55% thermal efficiency and 8,000 Btu/lb (dry) while burning bagasse.
[Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A, BACT]

B.2. Methods of Operation. The fuels that are allowed to be burned in these units are:
a. Carbonaceous fuel (bagasse and SCGCF residue),
b. No. 6 residual oil,
c. Small quantities of on-spec used oil,
d. Small quantities of non-hazardous waste contaminated soil that is generated on-site, and
e. Natural Gas, not to exceed 250 MMBtu/hr.
[Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0990026-019-AC, 0990026-039-AC & 0990026-040-AC]

*{Permitting Note: On-specification used oil is as defined in 40 CFR 279.11, Subpart B. ***Note:** Used oil containing more than 1,000 ppm but less than 4,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such oil shall not be burned unless the owner or operator demonstrates through the use of DEP approved analytical methods that the used oil does not constitute a hazardous waste.}*

B.3. Oxygen Level Alarm. The permittee shall maintain and operate an alarm system on Boiler No. 8 that will be triggered whenever the boiler oxygen level drops below 3 percent. The time the boiler operates with less than 3 percent oxygen shall be logged and may be used as a basis to modify the operation and maintenance plan. The permittee shall use the operation and maintenance plan for carbon monoxide control for Boiler 8. [Permit Nos. AC50-250421/PSD-FL-213 and BACT dated June 3, 1996 and 0990026-015-AC was the previous condition with 5.5 lb/MMBtu heat input]. This permit is revised (changed) to BACT CO limit of 3,500 ppmvd @ 3% O_2 which is equivalent to approximately 2.7 lb/MMBtu heat input. (This is in accordance

to the rule change regarding numerical values only). All other conditions remain in accordance to the BACT rule. The boiler O_2 is to be continuously monitored, and a minimum O_2 level be maintained based on a 30-day rolling average. The Boiler MACT rule also requires reporting deviations from the 30-day rolling average boiler O_2. [Table 2 to Subpart DDDDD of 40 CFR 63; and, Permit Nos. AC50-250421\PSD-FL-213 dated 06/04/96 & 0990026-015-AC\PSD-FL-077A]

{*Permitting Note: An operation and maintenance plan shall be maintained and kept up-to-date onsite by the owner or operator.}*

B.4. Hours of Operation. This emission unit may operate continuously (8,760 hours/year). [Permit No. 0990026-039-AC, Specific Condition A.4.]

{Permitting Note: The normal crop season typically consists of 180 operating days from October to April.}

B.5. Steam Production "CAP". The total steam production from all boilers (Nos. 1, 2, 3, 4, 5 & 8) shall not exceed 4,900,000,000 pounds based on a 12-month cap of the monthly moving 12-month averages, rolled monthly. Permit Nos. 0990026-039-AC, Specific Condition A.5., & 0990026-046-AC, Specific Condition 3.A.3.]

B.6. Method for compliance with the steam cap: Compliance with the steam cap shall be based on a "12-month cap of the monthly moving 12-month averages, rolled monthly" utilizing Equations 1 and 2 given below.

$CD_M = \sum_{i=1}^{12} MA_{M_i}$	Equation 1
$MA_M = \left[\sum_{i=1}^{12} SP_{M_i}\right] / 12$	Equation 2

Where:

CD_M means the monthly steam cap compliance demonstration for a given 12-month period and represents the sum of the calculated 12-month moving averages.

MA_M means the 12-month moving average monthly steam production over a given 12-month period.

SP_M means actual total steam produced for all six boilers in a given month.

[Permit No. 0990026-046-AC, Specific Condition 3.A.4]

B.7. Steam correction factors. The permittee is allowed to apply steam correction factors to the recorded steam production values based upon the manufacturer's provided steam correction factors. The permittee can program the steam correction into their data system to correct the every-5-second data. [Permit No. 0990026-046-AC, Specific Condition 3.A.5]

B.8. Fuel Oil Limitation and Fuel Oil Sulfur Content Limitations and Calculations. The permittee shall meter daily fuel oil consumption by Boiler No. 8 individually. The total quantity of fuel oil consumed on a daily basis by Boiler No. 8 shall be replaced by the addition to the system of an equal or greater amount of 1% or less sulfur fuel oil within 72 hours (excluding weekends). Records shall be retained for five (5) years. The balance of the oil in the system should not exceed 2.4% sulfur. For the purpose of simplicity, the fuel purchase scheme above will be in compliance when the total plant wide fuel oil consumption does not exceed 31,500* gallons per day. In the event that the daily consumption of oil exceeds 31,500 gallons, the permittee must demonstrate compliance with the 14 ton per day limit by providing the amounts of bagasse, residue, and oil combusted, and the sulfur content of the oil for each such day. The demonstration of compliance shall be based on the same assumptions used to derive the threshold oil consumption figure except that the actual sulfur content of the oil for each day shall be substituted for the 1.15% value. [Permit No. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981]

{Permitting Note: This threshold oil consumption figure is based upon the assumptions that the bagasse, residue and oil sulfur contents are 0.2%, 0.5% and 1.15%, respectively, and also SO_2 emissions from bagasse

and residue are 40% below the amounts calculated stoichiometrically and all sulfur in fuel oil is emitted as SO_2. If further tests show that the foregoing assumptions are significantly incorrect, the 31,500 gallons per day shall be adjusted accordingly.}

B.9. Maximum Fuel Oil Consumption. The maximum fuel oil consumption of the boiler is limited to the quantity equivalent to 250 MMBtu/hour (1,667 gallons per hour, if the heating value of the fuel oil is 18,500 Btu/lb) through the sizing of the flow controls and programming. [Permit Nos. AC50-42476\PSD-FL-077 & BACT dated 10/28/1981, 0990026-015-AC & 0990026-040-AC]

B.10. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.11. Scrubber Monitoring Equipment. Each scrubber control system shall be equipped with a manometer or equivalent instrument to measure the total pressure drop of the flue gas stream across each scrubber and with a flow meter or equivalent device (weir) to measure the total quantity of water flow to each scrubber. Data from these instruments shall be recorded each shift (every 8 hours) and shall be available for regulatory agencies inspection for five years. [Permit No. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981; Permit No. 0990026-015-AC/PSD-FL-077A]

*{Permitting Note: a) Boiler No. 8 has two scrubbers that are each equipped with continuously measuring water flow meters; b) Compliance with Specific Condition **B.24.** assures compliance with this condition.}*

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **B.12. - B.20.** are based on the specified averaging time of the applicable test method.

B.12. Emissions Limits. This emissions unit's (EU 008) maximum emission rates shall not exceed the emissions limits listed below.

Maximum Allowable Emissions				
Pollutant	**Lb/MMBtu**	**Lb/hr**	**Ton/day**	**Ton/year**
PM	0.137 for carbonaceous fuel 0.10 for fossil fuel	75.6 (95.0)*	----------	276 (326)*
SO_2	----------	----------	14.0**	----------
CO	5.01 (see also B.12 below)	2,772	----------	10,112
VOC	----------	140	----------	511
NO_X	----------	123	----------	449

Visible emissions: 30% opacity except for 40% no more than two minutes per hour.

* The air quality impact analysis was conducted on the basis of the emissions contained in parentheses. The numbers not contained in parentheses are based upon the BACT determination of 0.15 lb/10^6 Btu input limit. In project 0990026-017-AC/PSD-FL-077B, in order to maintain the 75.6 lb/hr PM limit (determined by BACT) at the increased heat input rate of 553.6 MMBtu/hr, a lower lb/MMBtu PM emission limit of 0.137 lb/MMBtu is required. Any revision of the BACT emission limit cannot exceed the 0.20 lb/10^6 Btu input Florida new source limit, nor will the allowable lb/hr and ton/yr emissions be allowed to exceed the numbers contained in parentheses.

** SO_2 emissions for all boilers from Unit 1 through 8.

[Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A, BACT]

B.13. Visible Emissions (VE).

a. Visible emissions (VE) from the bagasse handling system shall not exceed 10 percent (%) opacity over any six (6) minute period as measured by EPA Method 9. [Permit No. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981]

b. Visible emissions (VE) from the boiler shall not exceed Number 1.5 on the Ringelmann Chart (30% opacity) except that a density of Ringelmann Number 2 (40% opacity) is permissible for not more than two minutes in any one hour. [Rule 62-296.410(1)(b)1., F.A.C.; and, Permit No. AC50-42476\PSD-FL-077]

B.14. CO Emissions. CO emissions shall not exceed the more stringent of the following, a. or b.:
a. CO emissions shall not exceed 5.01 lbs/MMBtu heat input (assuming a boiler has a thermal efficiency of 55% when burning bagasse), 2,772 lb/hr (average of three runs of a minimum of 1 hour per run by EPA Method 10 as described in 40 CFR 60, Appendix A), and 10,112 TPY based on a maximum of 7,296 hours per year operation. Emissions of CO 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; Permit No. AC50-250421/PSD-FL-213 and BACT dated June 3, 1996; Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A; and, Permit Nos. 0990026-033-AC & 0990026-040-AC]
b. CO emissions 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; and, Permit Nos. 0990026-039-AC and -040-AC]

B.15. VOC Emissions. VOC emissions from EU008 shall not exceed 140 pounds per hour and 511 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 Nos. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A & 0990026-040-AC]

B.16. Nitrogen Oxides (NO_X) Emissions. NO_X emissions from the boiler shall not exceed 123 lb/hour and 449 tons/year. [Permit Nos. 0990026-017-AC (PSD-FL-077B & 213A & 0990026-040-AC]

B.17. Particulate Matter (PM) Emissions. PM emissions shall not exceed the more stringent of the following, a. or b.:
a. PM emissions shall not exceed 0.137 lbs/MMBtu of heat input of carbonaceous fuel plus 0.1 lbs/MMBtu heat input of fossil fuel. [Permit Nos. AC50-42476\PSD-FL-077& 0990026-040-AC; and BACT dated 10/28/1981]
b. Filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input or Total Selected Metals shall not exceed 4.5E-4 lbs/MMBtu of heat input. [Permit Nos. 0990026-027-AC and -040-AC; and, Table 2 to Subpart DDDDD of 40 CFR 63]

B.18. Sulfur Dioxide (SO_2). The total SO_2 emissions for all boilers combined (EU001, EU002, EU003, EU004, EU005 and EU008) shall not exceed 14 TPD). [Permit No. AC50-42476/PSD-FL-77 and BACT dated 10/28/81]

B.19. Hydrogen chloride. The (HCl) limits are 0.022 lb/MMBtu of heat input. On and after October 6, 2025, HCl emissions shall not exceed 0.020 lb/MMBtu of heat input. [40 CFR 63.7500(a)(1), Table 2, & Table 15 to Subpart DDDDD of 40 CFR 63; and, Permit No. 0990026-040-AC]

B.20. Mercury. The (Hg) limits are $5.7x10^{-6}$ lb/MMBtu of heat input. On and after October 6, 2025, Hg emissions shall not exceed $5.4x10^{-6}$ lb/MMBtu of heat input. [40 CFR 63.7500(a)(1), Table 2, & Table 15 to Subpart DDDDD of 40 CFR 63; and, Permit No. 0990026-040-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

B.21. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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 duration. [Rule 62-210.700(1), F.A.C.; and, Permit No. 0990026-019-AC]

B.22. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup,

shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.; and, Permit No. 0990026-019-AC]

B.23. Reporting of Excess Emissions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.; and, Permit No. 0990026-019-AC]

Monitoring of Operations

B.24. Monitoring of Operations.

a. *Fuel Monitoring.* Instruments shall be installed and maintained to continuously measure the amount of fuel oil used individually by Boiler No. 8, the total amount of fuel oil used by boilers 1 through 5, and the total amount of SCGCF residue and natural gas used in all boilers (EU001, EU002, EU003, EU004, EU005 and EU008). Bagasse consumption shall be calculated from steam consumption. The records of fuel oil, natural gas, SCGCF residue, and bagasse usage will be kept by the company, available for regulatory agency inspection for five years. [Permit Nos. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A, BACT]

b. *Tune-Up*. The permittee shall conduct a tune-up of the boiler annually, as specified in 40 CFR 63.7540, as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63; and, Permit No. 0990026-027-AC]

c. *Scrubber Pressure*. For each scrubber, the permittee shall maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation, pursuant to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD. [Table 4 to Subpart DDDDD of 40 CFR 63; and, Permit No. 0990026-027-AC]

B.25. Monitoring of Steam Production.

a. The permittee shall monitor and record the daily steam production rates of the boiler (24-hour block total, 8:00 a.m. to 8:00 a.m.) for each day of operation. [Rule 62-213.440(1)(b), F.A.C; and, Permit No. 0990026-033-AC]

b. Within 10 days following each calendar month, the permittee shall calculate and record the total steam production from all the boilers (EU001, EU002, EU003, EU004, EU005 and EU008) for the month and the new 12-month total steam production. [Rule 62-213.440(1)(b), F.A.C.; and, Permit No. 0990026-033-AC]

B.26. Flue Gas Oxygen or CO_2 Monitor. This emissions unit shall be equipped with an operational flue gas oxygen or CO_2 monitor. [Permit Nos. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981 & AC50-250421/PSD-FL-213 and BACT dated June 3, 1996]

B.27. CAM Plan. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(c), F.A.C. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and, 40 CFR 64]

{Permitting Note: Specific monitoring requirements related to each emissions unit are contained in the Appendix CAM.}

Test Methods and Procedures

B.28. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments

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
6	Determination of Sulfur Dioxide Emissions from Stationary Sources
6C	*Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental)*
7	*Determination of Nitrogen Oxide Emissions from Stationary Sources*
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources
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)
26	Determination of Hydrogen Chloride (HCl) Emissions
26A	Method for Determination of Hydrogen Halide and Halogen Emissions
29	Method for Determination of Metals Emission from Stationary Sources
30A	Method for Determination of Total Vapor Phase Mercury Emissions
101	Determination of Particulate and Gaseous Mercury Emissions

The above methods are described in 40 CFR 60, Appendix A, and 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. [Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60; and, Permit Nos. AC50-250421 (PSD-FL-213), 0990026-017-AC, 0990026-019-AC, 0990026-039-AC & 0990026-040-AC]

B.29. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310(9), F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

B.30. Annual Compliance Tests Required. During each calendar year, (January 1 to December 31) emission unit (EU008), shall be tested to demonstrate compliance with the emissions standards for **CO, HCl, Mercury, VE, PM, NO_X,** and **VOC.** The permitted hourly steam production rates and heat input rates shall not be exceeded during annual testing. Operating rate during testing shall comply with Rule 62-297.310(3), F.A.C. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rules 62-297.310(3) & 62-297.310(8)(a), F.A.C.; and, Permit No. 0990026-019-AC]

{Permitting Notes: a) A reduced test frequency of once every three(3) years is allowed per 40 CFR 63 Subpart DDDDD for CO, PM, HCl and Hg if two(2) years of test data are <75% of the standard; and, b) 40 CFR 63 Subpart DDDDD allows fuel analysis to be used as an alternative to performance testing. Therefore, the permittee may comply with the emission limits for HCl and mercury through fuel analysis, according to 40

CFR 63 Subpart DDDDD." See Appendix Alternate Sampling Procedure (ASP) for fuel sampling (ASP 15-11-AP issued by FDEP on 12/11/15).}

B.31. Compliance Tests Prior To Renewal. Compliance tests shall be performed for **VE, PM, NO_X, CO, VOC, HCl and mercury**, once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance**.** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

{Permitting note: As an alternative, the permittee may comply with the emission limits for HCl and mercury through fuel analysis, according to 40 CFR 63 Subpart DDDDD.}

B.32. General Testing Requirements. Compliance with the applicable emission limits shall be determined by performance tests. The performance tests shall be conducted in accordance with EPA Methods (Appendix NSPS, 40 CFR 60, Subpart A) and the provisions of 40 CFR 60.8 and 40 CFR 60.46. [Permit No. AC50-42476/PSD-FL-077 and BACT dated 10/28/1981].

B.33. PM Test Methods. Compliance with PM emissions limits shall be determined using EPA Methods 1, 2, 3, 4, and 5 in accordance with Appendix NSPS, 40 CFR 60, Subpart A. Emissions units incorporating a scrubber for control of particulate matter shall use an acetone wash. PM emissions tests shall be made while burning bagasse with the minimal amount of oil necessary to reach test capacity. [Permit No. AC50-42476/PSD-FL-77 and BACT dated 10/28/1981 and Permit No. 0990026-011-AC]

B.34. VOC Test Method. The test method for VOC shall be EPA Method 25 or EPA Method 25A modified to incorporate a sample dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. If EPA Method 25A is employed, EPA Method 18 may be used to quantify and subtract the methane fraction in the exhaust gases. Each test run shall be conducted in accordance with Appendix NSPS, 40 CFR 60, Subpart A using the method specified. [Permit No. 0990026-015-AC/PSD-FL-077A]

B.35. Stack Sampling Requirements. The stack sampling configuration of the boiler shall comply with the minimum of 2D downstream and 0.5D upstream distances to the sampling ports required to use EPA Method 2. [Permit No. AC50-42476/PSD-FL-077 and BACT dated 10/28/1981]

B.36. CO Test Method. CO emissions shall be determined using by EPA Method 10 as described in Appendix NSPS, 40 CFR 60, Subpart A. [Permit No. AC50-250421/PSD-FL-213; BACT dated June 3, 1996.]

B.37. NO_X Test Methods. Compliance with NO_X emissions limits shall be determined using EPA Method 7 or 7E as described in Appendix NSPS, 40 CFR 60, Subpart A. [Permit No. 0990026-011-AC]

B.38. VE Test Methods. Compliance with VE emissions limit shall be demonstrated using EPA Method 9. [Permit No. AC50-42476\PSD-FL-077 and BACT dated 10/28/1981.]

{Permitting Notes: Compliance with the PM emission limit in Condition **B.17.*b***, *and the CO, HCl and mercury emission limits, may be demonstrated according to the requirements of 40 CFR 63, Subpart DDDDD.*

The permittee may comply with the emission limits for HCl and mercury through fuel analysis, according to 40 CFR 63 Subpart DDDDD.}

B.39. Combined Plumes, Alternate Method for Stack Opacity. It is possible that combined plumes from adjacent boilers will prevent a reliable determination of compliance with the opacity standard. If the permittee is unable to perform the scheduled annual visible emissions test because of combined plumes, the permittee shall record the scrubber pressure drop and the water flow rate during each test run for particulate matter at 15-minute intervals. The test report shall note the attempt to perform the annual visible emissions test, the reason for not being able to complete the test and shall identify scrubber pressure drops and water flow rates recorded during each test run for particulate matter. [Permit No. 0990026-015-AC]

B.40. Operation and Maintenance Plan (OMP). The OMP for CO control shall include current permitted conditions for flue gas oxygen content levels and oxygen analyzer. [Permit No. 0990026-017-AC/PSD-FL-077B/PSD-FL-213A]

Recordkeeping and Reporting

B.41. Maintenance Records and Reports.

a. *Recordkeeping.* The permittee shall maintain a log on-site to record the date of major components replaced, the manufacturer, model number, and serial number of the new component and the component that was replaced. Major components of a boiler include: furnace/convection pass; steam drum; lower drum; waterwall tubing; superheater; economizer; air preheaters; fuel feed grates; supplemental fuel burners; and, forced/induced draft fans. If the manufacturer, model and serial number of the new or replaced components are not available, the log shall include a brief description of the "like-kind" components that were replaced. The log shall also include the dates and the description of any maintenance and repairs made to the boilers and any equipment as described above during each annual seasonal shutdown. All records related to any maintenance, repairs, replacement activities, and any testing shall be maintained on-site for 5-years and made available to the Department upon request.

b. *Report.* Within 60 days of beginning the cane milling season, the permittee shall submit a report to the compliance authority that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off-season maintenance inspections; and a summary of maintenance and repair activities for the next off season.

[Rule 62-4.070(3) & 62-213.440(1), F.A.C.]

B.42. ~~Actual Emissions Reporting. Permit Nos. 0990026-019-AC, 0990026-017-AC (PSD-FL-077B & 213A), 0990026-039-AC and 0990026-040-AC are 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 10 years following resumption of regular operations after the change authorized from Permit Nos. 0990026-017 & 019-AC. However, Permit Nos. 0990026-039-AC and 0990026-040-AC require 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 TV 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 or 10 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 TV 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 Department requires the annual reporting of actual PM/PM_{10}, NO_x, SO_2, CO, VOC and sulfuric acid mist (SAM) emissions for Permit Nos. 0990026-017-AC and 019-AC. For the project approved in Permit Nos. 0990026-039-AC and 0990026-040-AC, the permittee shall use the following methods in reporting the actual annual PM, CO, and VOC emissions for Boiler No. 008.~~

~~(1) *For calculating the Actual Emissions from Project No. 0990026-039-AC only:*~~

~~a. The permittee shall use the heat input rates of Boiler No. 8 and the emission factors established from Specific Condition **A.9.** of Permit No. 0990026-039-AC to determine and report the actual annual emissions of PM, CO and VOC for Boiler No. 8.~~

~~b. Unless otherwise approved by the Department, the permittee shall use the emission factors provided in Table 4-2 of the application dated 11/15/2016 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 for Application No. 0990026-039-AC.}*~~

~~(2) *For calculating the Actual Emissions from Project No. 0990026-040-AC only:* Unless otherwise approved by the Department, the permittee shall use the emission factors provided in Table 4-2 of the application dated 9/18/2017 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 27 of 125, contained in air permit Application No. 0990026-040-AC.}*~~

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

~~[Rules 62-212.300(1)(e) & 62-210.370, F.A.C.; and, Permit Nos. 0990026-017-AC, 019-AC, 039-AC & 040-AC]~~

~~*{Permitting Note: Baseline emissions for Project No. 0990026-017-AC were determined by the applicant to be 57.22 TPY of SO_2, 142.9 TPY of NO_x, 1,732 TPY of CO, 78.0/72.5 TPY of PM/PM_{10}, and 83.6 TPY of VOC and 2.5 TPY of SAM for EU No. 008)*~~

~~*Baseline emissions for Project No. 0990026-019-AC were determined by the applicant to be 216.0 TPY of SO_2, 525.2 TPY of NO_x, 6,324 TPY of CO, 244.0/266.8 TPY of PM/PM10, and 326.0 TPY of VOC and 9.55 TPY of SAM for EU Nos. 003-005 & 008 (combined).*~~

~~*The baseline emissions for Project No. 0990026-039-AC for CO, PM and VOC for EU Nos. 001-005 & 008 (combined) 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, for EU Nos. 001-005 & 008 (combined). Future evaluations of project emission increases will be evaluated by the Department on a case-by-case basis.*~~

~~*The baseline emissions for Project No. 0990026-040-AC for CO, PM and VOC were determined by the applicant to be 1,841.3 TPY, 83.56 TPY and 89.45 TPY, respectively. The Demand Growth Excluded emissions of CO, PM and VOC were determined by the applicant to be 677.0 TPY, 16.6 TPY and 53.2 TPY, respectively. Future evaluations of project emission increases will be evaluated by the Department on a case-by-case basis.}*~~

B.43. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

B.44. Reporting of Steam Production Exceedances. Any exceedance of the limitation in Specific Condition **B.5.** shall be reported to the Department within one business day after the discovery of the exceedance. [Permit Nos. AC50-42467/PSD-FL-077, 0990026-011-AC & 0990026-033-AC]

B.45. Fuel Recordkeeping. The records of fuel oil, SCGCF residue, on-spec used oil, bagasse, and natural gas shall be kept by the owner or operator, available for Department inspection for five years. [Permit No. AC 50-42476/PSD-FL-077 and BACT dated 10/28/1981]

B.46. Fuel Sulfur Content Recordkeeping. Records of the percent sulfur content of all fuel oil burned, and the quantities of fuel oil burned shall be kept. The basis of these records of sulfur content shall be either as-shipped analysis from the vendor, analysis of shipments by the permittee, or in the case of on-site blending, analysis of a fuel sample from the fuel storage tank(s) each time a shipment of fuel is received. [Permit No. 0990026-011-AC]

B.47. Steam Flow Recordkeeping. A record shall be kept of each boiler's hours of operation and the steam flow to determine the heat input for the purpose of compliance with the emission limits specified in this subsection. **[**Permit No. 0990026-011-AC**]**

B.48. CAM Recordkeeping and Reporting. For this emissions unit, the owner or operator shall record, maintain and reporting all monitoring, other activities and reporting in accordance with the requirements in Appendix CAM and 40 CFR 64 (Compliance Assurance Monitoring). [Rule 62-213.440(1)(b), F.A.C., 40 CFR 64]

B.49. Test Reports. Submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-Wide Testing Requirements). For each test report, the report shall also indicate heat input calculations, enthalpy calculations, emission calculations and the actual (metered) amount of fuel oil or natural gas used during testing**.** [Rule 62-297.310(8), F.A.C.; and, Permit No. 0990026-020-AC]

Other Requirements

B.50. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the requirements contained in 40 CFR 64 – Compliance Assurance Monitoring and 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, and all subsequent final revisions of these subparts. (See Appendix NESHAP – 40 CFR 63, Subpart DDDDD) [Rule 62-213.440, F.A.C.]

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Subsection C. Emissions Unit 009

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
009	"Spray Booth" is an open frame structure where sugar cane trailers and sugar cane wagons can be maneuvered to allow the application of a petroleum based protective coating with an airless sprayer to all exposed surfaces of the trailers and wagons.

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. The hours of operation for this emissions unit shall not exceed 10 hours per day, 5 days per week and 32 weeks per year (1,600 hours/year). [Rules 62-4.160(2) & 62-210.200 (PTE), F.A.C.; and, Permit No. 0990026-011-AC]

Emission Limitations and Standards

C.2. Volatile Organic Compounds. Total VOC emissions from this emissions unit shall not exceed 50 lb/hour or 24 tons per year. [Permit No. 0990026-011-AC]

{*Permitting Note: This emissions unit emits insignificant amounts of HAP.*}

Record Keeping and Reporting Requirements

C.3. Recordkeeping Requirements. The facility shall keep a log with the following information:

a. The number of hours the spray booth (EU009) is in use (actual) on a daily basis;
b. The dates of operation;
c. A monthly inventory of the VOC and HAP containing materials, solvents and HAP containing materials used in the spray booth (EU009). The monthly inventory shall utilize the mass balance approach. The permittee shall calculate the VOCs emitted on a monthly basis by assuming that all VOCs and HAP in the coatings and cleanup solvents are evaporated. The mass fraction of VOCs and HAP from each coating material (and cleanup solvents) shall be determined from the MSDS supplied from the vendors. The monthly inventory recordkeeping shall include the identification of all VOC and HAP containing material, the amount of material used, the percent or by weight composition of VOC or HAP in each material from the MSDS, and the monthly total amount of VOC and HAP emitted.

[Permit No. 0990026-015-AC]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Unit 010

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
010	Bagasse Processing and Fiber Products Operation

This emissions unit is comprised of a front-end loader, weigh conveyor, screw conveyor, mix tank, retention tank, presses, refiners, cleaners, screens, storage tanks and molding equipment. The plant began operation in March 2018. Air pollutant emissions from this unit are uncontrolled.

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum allowable process or throughput rate is 90 oven dried tons per day (ODTPD) of bagasse, resulting in the maximum production rate of 30.5 ODTPD of molded bagasse fiber products. [Rules 62-4.160(2), 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-046-AC]

D.2. Authorized Fuel. Steam heat from a 5.2 MMBtu/hour boiler (EU No. 011) shall be used for the processing operation. Natural gas is the only authorized fuel for the boiler. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-044-AC]

D.3. Hours of Operation. The hours of operation are not restricted (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-031-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition **D.4.** is based on the specified averaging time of the applicable test method.

D.4. Visible emissions. Visible emissions shall not exceed 20% opacity. [Permit No. 0990026-031-AC]

D.5. Volatile Organic Compounds (VOC) Emissions. VOC emissions shall not exceed 10.30 tons/year. [Permit No. 0990026-031-AC]

D.6. Hazardous Air Pollutant (HAP) Emissions. HAP emissions shall not exceed 9.77 tons/year. [Permit No. 0990026-031-AC]

D.7. Methanol Emissions. Methanol emissions shall not exceed 8.41 tons/year. [Permit No. 0990026-031-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

D.8. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and 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 duration. [Rule 62-210.700(1), F.A.C.]

D.9. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

Test Methods and Procedures

D.10. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
9	Visual Determination of the Opacity of Emissions from Stationary Sources
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography

The above methods are described in 40 CFR 60, Appendix A, and 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. [Rule 62-204.800, F.A.C.; and, Permit Nos. 0990026-044-AC and -046-AC]

D.11. Common Testing Requirements. Unless otherwise specified tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

D.12. Compliance Tests Prior to Renewal. Except as provided in subparagraph 62-297.310(8)(b)3., F.A.C. (see condition **TR7.b.(3)** in Appendix TR - Facility-wide Testing Requirements), a compliance test shall be performed for visible emissions prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Conditions **D.4.** [Rules 62-210.300(2)(a) & 62-297.310(8)(b), F.A.C.]

Recordkeeping and Reporting Requirements

D.13. Operational Data Records. To demonstrate compliance with Specific Condition **D.1.**, the permittee shall maintain daily records of the maximum process rate of bagasse and the maximum rate of the fiber products produced and sent to the molding process. These values are to be stated in ODTPD units. [Permit No. 0990026-031-AC]

D.14. Annual Emissions Records. The permittee shall monitor the emissions for VOC, HAP, and methanol, using the most reliable information available, calculate and maintain a record of the annual emissions (in TPY on a calendar year basic) for a period of five (5) years after start up. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C. [Rule 62-212.300(1)(e)1, F.A.C.; and, Permit No. 0990026-031-AC]

D.15. Annual Emissions Report. The permittee shall report to the Department within 60 days after the end of each calendar year during which records must be generated under Rule 62-212.300(1)(e)1, F.A.C., setting out the unit's annual emissions and calculated VOC, HAP, and methanol emission factors during the calendar year that preceded submission of the report. The report shall contain the following:

a. The name, address and telephone number of the owner or operator;
b. The annual emissions as calculated pursuant to Rule 62-212.300(1)(e)1., F.A.C.;
c. If the emissions or calculated VOC, HAP, or methanol emission factors differ from the preconstruction projection, an explanation as to why there is a difference; and
d. Any other information that the owner or operator wishes to include in the report.

[Rule 62-212.300(1)(e)2., F.A.C.; and, Permit No. 0990026-031-AC]

D.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 011

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
011	5.2 MMBtu/hour Natural Gas Fired Boiler "A" (130 hp)

This boiler was manufactured in 2017 by Fulton® (Model No. VMP 130). The unit was installed at the Glades Sugar House in March 2018 and is used to provide steam for use in the production of fiber products made from bagasse. The boiler is fired solely on natural gas with a maximum heat input rate of 5.2 MMBtu/hour.

Emissions from this boiler are exhausted through a vertical stack which is 30 feet tall, has an exit diameter of 1 foot, an exit flow rate of 2,082 acfm, and an exit temperature of 346°F.

{Permitting note: This emission unit is regulated under 40 CFR 63, Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rule 62.204.800(11)(b)86, F.A.C., and Rule 62-296.406, F.A.C., Fossil Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emission Units.}

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The maximum heat input of shall not exceed 5.2 MMBtu/hour. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-044-AC]

E.2. Authorized Fuel. This boiler is permitted to be fired with natural gas only. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-031-AC]

E.3. Hours of Operation. The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-031-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition **E.4.** is based on the specified averaging time of the applicable test method.

E.4. Visible Emissions. Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.; and, Permit No. 0990026-044-AC]

E.5. Particulate Matter (PM) Emissions. Particulate Matter Emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.; and, Permit No. 0990026-044-AC]

E.6. Sulfur Dioxide (SO_2) Emissions. Sulfur Dioxide emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.; and, Permit No. 0990026-044-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

E.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and 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 duration. [Rule 62-210.700(1), F.A.C.]

E.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

E.9. Compliance With Tune-up. For this boiler, the permittee shall conduct a tune-up meeting the requirements of 40 CFR 63.7540(a)(11) once every two (2) years. [Rule 62-4.070(3), F.A.C.; and, 40 CFR 63.7500(e) & 40 CFR 63.7515(d)]

Test Methods and Procedures

E.10. Test Methods. When 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
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in 40 CFR 60, Appendix A, and 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. [Rule 62-204.800, F.A.C.; and, Permit 0990026-044-AC]

E.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

[Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.]

E.12. Compliance Tests Prior To Renewal. Except as provided in subparagraph 62-297.310(8)(b)3., F.A.C. (see condition **TR7.b.(3)** in Appendix TR – Facility-wide Testing Requirements), a compliance tests shall be performed for Visible Emissions prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Conditions **E.4.** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

Recordkeeping and Reporting Requirements

E.13. Biennial Compliance Report. Upon Completion of the tune-up specified in Specific Condition **E.9.**, the permittee shall submit a biennial Compliance Report by March 1st of the year following the year in which the tune-up occurred, including the following information:
a. Company and Facility name and address;
b. Process unit information, emission limitations, and operating parameter limitations;
c. Date of report and beginning and ending dates of the reporting period;
d. The date of the most recent tune-up.
e. Statement by a responsible official with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
[40 CFR 63.7550(c)]

E.14. Fuel Recordkeeping. The records of natural fuel gas shall be kept by the owner or operator, available for Department inspection for five years. [Permit No. 0990026-031-AC]

E.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Unit 012

The specific conditions in this section apply to the following emissions unit:

ID No.	Emission Unit Description
012	Emergency Spark Ignited Engine (maximum design rating of 636 HP)

This subsection of the permit is comprised of a spark ignition (SI) type engine used to drive an electric emergency fire pump. Natural gas is used to fire this engine.

The following table provides important details for this engine:

Engine Brake HP	Date of Manufacture	Year Installed	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
636 (400 kW)	2017	2018	1.83 l/c (12 cyl)	Generac	SG400

*{Permitting Notes: This spark ignition reciprocating internal combustion engine (SI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE (initial notification **only** pursuant to 40 CFR 63.6590(b)(1)(i)) and 40 CFR 60, Subpart JJJJ, NSPS for Spark Ignition Internal Combustion Engines, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This is a **"new"** stationary emergency SI RICE with a displacement of less than 10 liters per cylinder, located at a **major source of HAP**, that commenced construction after 6/12/2006, and that has a post-2009 model year. Emissions from this engine are exhausted through a single 12-feet horizontal stack which has an exit diameter of 6 inches, an exit flow rate of approximately 2,720 acfm, and an exit temperature of 1,350 °F.}*

Essential Potential to Emit (PTE) Parameters

F.1. Authorized Fuel. This spark ignition engine is fueled by natural gas, only. [Application No. 0990026-047-AV]

F.2. Restricted Hours of Operation. You must operate these emergency engines according to the requirements in paragraphs **a.** through **c.** In order for these engines to be considered emergency stationary ICE under Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in the paragraphs below, is prohibited. If you do not operate these engines according to the requirements in paragraphs **a.** through **c.** below, these engines will not be considered emergency engines and must meet all requirements for non-emergency engines pursuant to 40 CFR 60, Subpart JJJJ. [40 CFR 60.4243(d)]

a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4243(d)(1)]

b. *Maintenance and Testing.* This engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 60.4243(d)(2)(i)]

c. *Non-emergency Situations.* This engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 60.4243(d)(3)]

Emissions Standards

F.3. NO_x Emissions. Nitrogen oxides (NO_x) emissions shall not exceed 2.0 grams per horsepower hour (g/HP-hr). [40 CFR 60.4233(e) & Table 1]

F.4. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 4.0 g/HP-hr. [40 CFR 60.4233(e) & Table 1]

F.5. VOC Emissions. Volatile Organic Compounds (VOC) emissions shall not exceed 1.0 g/HP-hr. When calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included. [40 CFR 60.4233(e) & Table 1]

Monitoring Requirements

F.6. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4237(a)]

Testing and Compliance Requirements

F.7. Operation and Maintenance. The owner or operator must operate and maintain this engine to achieve the emission standards specified in Specific Conditions **F.3. F.4.** over the entire life of the engine. [40 CFR 60.4234]

F.8. Compliance Requirements. You must demonstrate compliance according to one of the following options:

a. *Certified Engine Operated According to Manufacturer*. If you purchased an engine certified to meet the emissions limits in Specific Conditions **F.3. F.5.**, you must demonstrate compliance according to one of the following methods:

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(b)(1) & 40 CFR 60.4243(a)(1)]

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(a)(2)(ii)]

[Rule 62-213.440, F.A.C.; and, 40 CFR 60.4243(b)(1) & 40 CFR 60.4243(a)(2)]

b. *Non-Certified Engine*. If you purchased a non-certified engine, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the emission standards specified in Specific Conditions **F.3. F.5.** according to the requirements specified in Specific Condition **F.9**. [40 CFR 60.4243(b)(2) & (b)(2)(i)]

F.9. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **F.8.**, the following requirements shall be met:

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 (Link to 40 CFR 60.8) and under the specific conditions that are specified by Table 2 of 40 CFR 60, Subpart JJJJ (Link to Table 2).

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to start up the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

c. You must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

d. To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

f. When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

g. If you choose to measure VOC emissions using either Method 18 of 40 CFR 60, Appendix A (Link to Method 18), or Method 320 of 40 CFR 63, Appendix A (Link to Method 320), then you have the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_M}{C_{Ai}} \quad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{M-i} = Measured concentration of compound i in ppmv as carbon.

C_{A-i} = True concentration of compound i in ppmv as carbon.

$$C_{ico} = RF_i \times C_{imea} \quad \text{(Eq. 5)}$$

Where:

C_{i-corr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{i-meas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \quad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[40 CFR 60.4244]

F.10. Common Testing Requirements. Unless otherwise specified and if required, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Records and Reports

F.11. Compliance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine, the owner and operator must keep records of the following information:

a. *Notifications*. All notifications submitted to comply with 40 CFR 60, Subpart JJJJ, as specified in this subsection of the permit, and all documentation supporting any notification.

b. *Maintenance Log*. Maintenance conducted on the engine. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

c. *Manufacturer Certification Documentation*. If the emissions unit is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

d. *Documentation showing Compliance with Standards*. If the SI ICE is not a certified engine or is a certified engine operating in a non certified manner and subject to Specific Condition **F.8.**a.(2), documentation that the engine meets the emission standards.

[Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.4245(a)]

F.12. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non emergency service that are recorded through the non resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4245(b)]

F.13. Test Reports. You must submit a copy of each performance test as conducted in Specific Condition F.9 within 60 days after the test has been completed. [40 CFR 60.4245(d)]

F.14. Other Reporting Requirements. See Appendix RR, Facility Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

F.15. 40 CFR 60, Subpart A - General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60, Subpart A - General Provisions, as specified below.
Link to Subpart A and Link to Subpart JJJJ

General Provisions Citation	Subject of Citation	Explanation
§ 60.1	General applicability of the General Provisions	
§ 60.2	Definitions	Additional terms defined in § 60.4248.
§ 60.3	Units and abbreviations	
§ 60.4	Address	
§ 60.5	Determination of construction or modification	
§ 60.6	Review of plans	
§ 60.7	Notification and Recordkeeping	Except that § 60.7 only applies as specified in § 60.4245.
§ 60.8	Performance tests	Except that § 60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§ 60.9	Availability of information	
§ 60.10	State Authority	
§ 60.11	Compliance with standards and maintenance requirements	Requirements are specified in subpart JJJJ.
§ 60.12	Circumvention	
§ 60.14	Modification	
§ 60.15	Reconstruction	
§ 60.16	Priority list	
§ 60.17	Incorporations by reference	
§ 60.19	General notification and reporting requirements	

[40 CFR 60.4246 and Table 3 to 40 CFR 60, Subpart JJJJ]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 013

The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
013	28 MMBtu/hr Natural Gas Fired Boiler ("Boiler C")

This boiler is natural gas fired equipped with low NOx burners.

{Permitting Note: This emissions unit is regulated under 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, or Institutional Boiler or Process Heater, a.k.a. "Boiler MACT;" Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units; and, Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.

Natural gas is considered to be a "gas 1 subcategory" under 40 CFR 63, Subpart DDDDD (see 40 CFR 63.7575, Definitions). The boiler is therefore not subject to the emission limits or the operating limits of 40 CFR 63, Subpart DDDDD. There is a tune-up requirement for the boiler.}

Essential Potential to Emit (Pte) Parameters

G.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990026-046-AC, Specific Condition 3]

G.2. Methods of Operation – Fuels. The boiler shall be fired exclusively on natural gas. [BACT Determination for particulate matter (PM) and sulfur dioxide (SO_2) emissions under Rule 296.406(2) & (3), F.A.C.; Rule 62-213.410(1) & 62-213.440(1), Methods of Operation, F.A.C.; and, Permit No. 0990026-046-AC, Specific Condition 4]

Emissions Standards

G.3. Visible Emissions. Visible emissions (VE) shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

G.4. Particulate Matter Emissions. Particulate matter (PM) emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.]

G.5. Sulfur Dioxide Emissions. Sulfur dioxide (SO_2) emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.]

Testing, Methods and Procedures and Compliance Requirements

G.6. Compliance Test Notification. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required compliance tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test. [Rules 62-4.070(1)&(3) and 62-297.310(9), F.A.C.]

G.7. Test Methods. When required, tests shall be performed in accordance with the following reference method:

EPA Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in 40 CFR 60, Appendix A, and 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. [Rule 62-204.800, F.A.C.; 40 CFR 60, Appendix A.]

Other Requirements

G.8. Boilers with > 10 MMBtu/hr heat input capacity. The permittee must conduct a tune-up of the boiler annually as specified in 40 CFR 63.7540. [40 CFR 63.7540(a)(10) (Subpart DDDDD).]

{Permitting Note: The tune-up will be conducted as a work practice for all regulated emissions under 40 CFR 63, Subpart DDDDD.}

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 015

The specific conditions in this section apply to the following emissions unit:

EU No.	Emission Unit Description
015	Hot Water Heater 1.89 MMBtu/hr

The hot water heater was manufactured by Sioux (Model HM1.7). The unit was installed at the Glades Sugar House in June 2022 and is used for backflushing and cleaning the nano-membrane filters used in the technology to treat bagasse residue. The water heater will be capable of supplying hot water up to 100 gallons per minute (gal/min) and will heat a tank sized for 1,000 gallons.

Emissions from this hot water heater are exhausted through a vertical stack which is 4.3 feet tall, has an exit diameter of 1 foot, an exit flow rate of 646 acfm, and an exit temperature of 357°F.

{Permitting Note: This emission unit is regulated under 40 CFR 63, Subpart A, General Provisions, and Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rule 62.204.800(11)(b)86, F.A.C.}

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The maximum allowable heat input is 1.89 MMBtu/hour. The permittee shall operate and maintain the hot water heater in accordance with the manufacturer's recommendations. [Rule 62-210.200(PTE), F.A.C., and Permit No. 0990026-048-AC.]

H.2. Authorized Fuel. The hot water heater shall fire natural gas only. [Rule 62-210.200(PTE), F.A.C., and Permit No. 0990026-048-AC.]

H.3. Hours of Operation. This emissions unit may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C., Permit No. 0990026-048-AC]

Monitoring of Operations

H.4. Compliance with Tune-up. For this hot water heater, the permittee must conduct a tune-up meeting the requirements of 40 CFR 63.7540(a)(12) once every five (5) years. [Rule 62.204.800(11)(b)86., F.A.C.; and, 40 CFR 63.7500(e) & 40 CFR 63.7515(d)]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

Recordkeeping and Reporting Requirements

H.5. 5-year Compliance Report. Upon the completion of the tune-up specified in Specific Condition **H.4.**, the permittee shall submit a 5-year compliance report by January 31 of the following year in which the tune-up occurred, including the following information:

a. Company and Facility name and address.
b. Process unit information, emissions limitation, and operating parameter limitations.
c. Date of report and beginning and ending dates of the reporting period.
d. The date of the most recent tune-up.
e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[Rule 62-204.800(11)(b)86., F.A.C.; and 40 CFR 63.7550(c)]

H.6. 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.]

H.7. Other Reporting Requirements. See Appendix RR, Facility Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

H.8. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the requirements contained in 40 CFR 63, Subparts A - General Provisions and DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted by reference in Rule 62-204.800, F.A.C. (See Appendix NESHAP - 40 CFR 63, Subpart DDDDD) [Rule 62-204.800(11)(b)86., F.A.C.; and NESHAP Subpart A and DDDDD of 40 CFR 63]

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