Title V Air Operation Permit Revision Permit No. 0990026-052-AV

APPLICANT

The applicant for this project is the Sugar Cane Growers Cooperative of Florida. The applicant's responsible official and mailing address are: Grant Lanham, Vice President – Environmental, Sugar Cane Growers Cooperative of Florida, Glades Sugar House, 1500 George Wedgeworth Way, Belle Glade, FL 33430-0666.

FACILITY DESCRIPTION

The applicant operates the existing Glades Sugar House, which is located in Palm Beach County at 1500 George Wedgeworth Way, Belle Glade, Florida.

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.

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 designed to produce 30.5 ODTPD of molded bagasse fiber products, such as plates, and operates year-round.

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.

REGULATED EMISSIONS UNIT IDENTIFICATION NUMBERS AND DESCRIPTIONS

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	
Unregulated Emissions Units		

014 H₂S Degasifier Vents for Well Water

APPLICABLE REGULATIONS

Based on the Title V air operation permit revision application received on November 26, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (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).	
Federal Rule Citations		
40 CFR 63, Subpart A – NESHAP General Provisions	001, 002, 003, 004, 005, 008	
40 CFR 63, Subpart DDDDD – NESHAP		
40 CFR 64 – Compliance Assurance Monitoring		
State Rule Citations		
Chapter 62-4, F.A.C. – Permits		
Rule 62-204.800, F.A.C. – Federal Regulations Adopted by Reference	001, 002, 003, 004, 005, 008	
Chapter 62-210, F.A.C. – Stationary Sources – General Requirements		
Chapter 62-213, F.A.C Operation Permits for Major Sources of Air Pollution		
Rule 62-296.320, F.AC General Pollutant Emission Limiting Standards		
Rule 62-296.410, F.AC. – Carbonaceous Fuel Burning Equipment		
Rule 62-296.570, F.AC. – Reasonably Available Control Technology (RACT) – Requirements for Major VOC and NO _X -Emitting Facilities		
Rule 62-297.310, F.A.C. – General Emissions Test Requirements		

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to revise the existing Title V permit for the above referenced facility. This revision removes existing Tellus facility units from this Title V air operation permit to reflect that the Tellus facility, due to operational changes made in September 2024, is now classified as an exempt facility, pursuant to Rule 62-210.300(3)(b)2., F.A.C. The Tellus facility and Glades Sugar House will be classified as separate facilities for Title V and PSD permitting purposes.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Title V Air Operation Permit renewal issued **October 14, 2021**1st Title V Air Operation Permit Revision issued **September 27, 2022**2nd Title V Air Operation Permit Revision issued **January 9, 2025**Proposed Title V Air Operation Permit Revision issued **February 21, 2025**

PRIMARY REGULATORY REQUIREMENTS

<u>Standard Industrial Classification (SIC) Code</u>: 2061 – Cane Sugar.

North American Industry Classification System (NAICS): 311314 – Cane Sugar Manufacturing.

HAP: The facility is identified as a major source of hazardous air pollutants (HAP).

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

<u>PSD</u>: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

<u>NSPS</u>: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

<u>NESHAP</u>: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

<u>CAM</u>: Compliance Assurance Monitoring (CAM) applies to EU Nos. 001, 002, 003, 005, and 008 for the controlled emissions of particulate matter (wet scrubbers).

GHG: The facility is not identified as a major source of greenhouse gas (GHG) pollutants.

PROJECT REVIEW

EU Nos. 010-016 have been removed from the permit body. Appendices incorporating to 40 CFR 60, Subpart A, Subpart Dc, and Subpart JJJJ have been removed. Table H has been removed from the Appendices. Appendix RR, TR, and TV have been updated. Appendices incorporating 40 CFR 63, Subpart A and Subpart DDDDD have been updated. Insignificant emissions units belonging to the Tellus facility have been removed from Appendix I. Table H has been updated. Changes to the permit made as part of this revision are shown in strike through format for deletions and in double underline format for additions. For ease of identification, all changes have also been highlighted in yellow within the permit document. The revisions shown below are the only portions of the permit that are open for public comment or challenge. Comments received related to the remainder of the permit will not be addressed during this permitting action.

General Changes

1. The letterhead, placard page, headers and footers have been revised to reflect the current Title V air operation permit template.

Table of Contents Changes

- 2. To reflect the reclassification of the Tellus facility as a separate exempt source and the removal of EU No. 015, the entries for Section III, Subsections D, E, F, G, and H have been removed.
- 3. As a result of the reclassification of the Tellus facility as a separate exempt source, EU Nos. 011, 013, and 015, which are regulated utility boilers and process heaters and EU No. 012, an emergency engine, have been removed from the permit. To reflect the removal of these units, Appendix entries for 40 CFR 60, Subparts A, Dc, and JJJJ and Figure 1 have been removed from the permit.

Section I Changes

4. To reflect the reclassification of the Tellus facility as a separate exempt source, the facility description in Subsection A has been revised as follows:

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 vear-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.

5. To reflect the reclassification of the Tellus facility as a separate exempt source, the facility description in Subsection B has been revised as follows:

EU No.	Brief Description	
Regulated I	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 ₂ S Degasifier Vents for Well Water	

6. To reflect the reclassification of the Tellus facility as a separate exempt source, the summary of applicable regulations in Subsection C has been revised as follows:

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 <mark>, 010, 011, 012, 013, 015</mark>
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 <mark>, 010, 011, 012, 013, 015</mark>
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 <mark>, 010, 011, 012, 013, 015</mark>
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 <mark>, 010, 011, 012, 013, 015</mark>
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 <mark>, 010, 011, 013, 015</mark>
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 <mark>, 011, 013, 015</mark>
40 CFR 63 Subpart DDDDD	001, 002, 003, 004, 005, 008 <mark>, 011, 013, 015</mark>

Section III Changes

7. To reflect the reclassification of the Tellus facility as a separate exempt source, EU Nos. 010-015 have been removed from the permit body. As a result, Section III, Subsections E, F, G, and H have been removed.

Appendices Changes

- 8. As a result of the reclassification of the Tellus facility as a separate exempt source, EU Nos. 011, 013, and 015, which are regulated utility boilers and process heaters and EU No. 012, an emergency engine, have been removed from the permit. To reflect the removal of these units, Appendix NSPS 40 CFR 60, Subpart A; Appendix NSPS 40 CFR 60, Subpart Dc; Appendix NSPS 40 CFR 60, Subpart JJJJ; and Figure 1 have been removed from the Appendices.
- 9. To reflect the reclassification of the Tellus facility as a separate exempt source, several insignificant emissions units have been removed. As a result, Appendix I has been updated as follows:

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., <u>Categorical Exemptions</u>, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., <u>Generic Emissions Unit Exemption</u>, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C., as identified in Title V air operation permit renewal application received April 12, 2021, and the Title V air operation permit revision application received July 28, 2022 November 26, 2024.

Brief Description of Emissions Units and/or Activities

Emai	Dunning Augus		
<u>Em</u> 1.	<u>ission Source</u> Natural gas station	Process Area A discont to molesses tank	
		Adjacent to molasses tank	
2.	Painting of vehicles	Agricultural shops Agriculture shops	
3.	Agricultural shop operations		
4.	Oil/water separator and holding tanks	Agriculture shops	
	Bagasse Feed System	Bagasse Processing/Fiber Products Operation	
	Pulping Operation	Bagasse Processing/Fiber Products Operation	
	Molding Operation	Bagasse Processing/Fiber Products Operation	
	Chemical tanks, wastewater tanks, pulp tanks	Bagasse Processing/Fiber Products Operation	
9.	Bagasse and Ash Piles	Bagasse Storage Pile Area	
	Scrubber water ponds	Bagasse Storage Pile Area	
	Ash ponds	Bagasse Storage Pile Area	
	Bagacillo cyclones	Boiling House	
	Bagacillo handling system	Boiling House	
	Crystallizers	Boiling House	
	Cane juice heaters	Boiling House	
	Centrifugals with mixers	Boiling House	
	Clarified juice heaters	Boiling House	
	Clarified juice tanks	Boiling House	
	Clarifier tanks	Boiling House	
	Coagulant mix tanks	Boiling House	
	Evaporator cleaning operations	Boiling House	
	Magma holding tanks	Boiling House	
	Mud filter condensers/vacuumpumps	Boiling House	
24.	Mud mix tanks	Boiling House	
25.	Mud waste tanks	Boiling House	
26.	Pan condensers/steaminjectors	Boiling House	
27.	Rotary vacuum filters/coagulant tanks	Boiling House	
28.	Sugar receiver tanks	Boiling House	
29.	Syrup storage tanks	Boiling House	
30.	Vacuum pumps	Boiling House	
31.	Juice Filter	Boiling House	
32.	Bagasse conveyor back to mills	Boiling House	
33.	Mill Mud Conveying and Truck Loading	Boiling House	
34.	Vacuum Pans	Boiling House	
35.	Evaporators	Boiling House	
36.	Cane Re-Loading Station (Conveyor)	Cane Delivery	
37.	Lime Silos	Chemical Storage Area	
38.	Acid Tanks (muriatic, phosphoric)	Chemical Storage Area	
39.	Caustic Tanks (NaOH)	Chemical Storage Area	
40.	Neutralization Tank	Chemical Storage Area	
41.	Cooling water inlet screen	Facility-wide	
42.	Molasses storage tanks	Facility-wide	
43.	Portable diesel air compressor (painting)	Facility-wide	
	Used oil storage tanks/drums	Facility-wide	
	Cooling towers	Facility-wide	
	Cold cleaning devices	Facility-wide	
	Containers for oils, wax, grease	Facility-wide	
	Portable diesel Emergency generators	Facility-wide	
	Sugar Warehouses	Facility-wide	
	Gear boxes, reducer vents	Facility-wide	
	Oil separators/skimmer equipment	Facility-wide	
	D 0 1 1	T 114 11	

52. Process flanges and valves

Facility-wide

5 0	D . 11 1' 1 '	F 75 11
	Portable diesel air compressors	Facility-wide
	Portable welders	Facility-wide
	Pressurized propane tanks	Facility-wide
	Process water intake traveling screens	Facility-wide
	Pump vents	Facility-wide
	Used oil tanks/drums (covered)	Facility-wide
	Vacuum cleaning systems	Facility-wide
	Vehicle-generated dust	Facility-wide
	Vents from hydraulic/lube oil reservoirs	Facility-wide
	Locomotives (diesel engines)	Facility-wide
63.	Shuttle Wagons	Facility-wide
64.	Diesel fuel dispensers	Facility-wide
65.	Gasoline dispensers	Facility-wide
66.	Gasoline storage tanks	Facility-wide
67.	Heavy truck diesel dispensers	Facility-wide
68.	Hydraulic fluid storage tanks	Facility-wide
69.	Kerosene storage tanks	Facility-wide
70.	Lube oil storage tanks	Facility-wide
71.	Oil/water separators	Facility-wide
72.	Wastewaterponds	Industrial Wastewater Ponds
73.	Industrial water plant (potable water)	Industrial Water Plant
	H ₂ S Degasifier	Industrial Water Plant
75.	Boiler ash pit/handling	Industrial Water Plant
	Boiler blowdown pipes/vents	Mill Boiler Area
77.	Boiler water chemical prep tanks	Mill Boiler Area
	Bunker C storage tanks	Mill Boiler Area
	Deaerator	Mill Boiler Area
80.	Bagasse Handling System	Mill Boiler Area
	Bagasse Conveying System Baghouses (7)	Mill Boiler Area
	Bagasse Depither systemfor Tellus (2 cyclones)	Mill Boiler Area
	Evaporators for Bagasse Residue	Mill Boiler Area
	Bagasse Residue Dilute Tanks	<mark>Mill-Boiler-Area</mark>
	Bagasse Residue Concentrate Tanks	Mill Boiler Area
	Solvent Still (Paint Booth)	Paint Booth
	North and South Spray Booths	Paint Booth
	Steam Turbine Electric Generators	Power Plant
89.	Woodworking equipment (not vented)	Woodworking shop
	1,000 gallon Water Tank	Bagasse Processing/Fiber Products Operation
91.	500-HP Temporary Boiler (Date Startup: June 6,	Bagasse Processing/Fiber Products Operation
	2022)	
/ Do	rmitting Note: The temporary boiler shall meet the re	cord kaaning raquirements in accordance with 10

{Permitting Note: The temporary boiler shall meet the recordkeeping requirements in accordance with 40 CFR 60 Subpart Dc, see Appendix NSPS — 40 CFR 60, Subpart Dc.}

- 10. To reflect the current versions of applicable federal and state regulations, Appendix RR, Appendix TR, Appendix TV, Appendix NESHAP Subpart A, and Appendix NESHAP Subpart DDDDD have been updated.
- 11. Table H has been updated with entries for Permit Nos. 0990026-050-AC, 0990026-051-AC, and 0990026-052-AV.

CONCLUSION

This project revises Title V Air Operation Permit No. 0990026-047-AV, which was effective on October 14, 2021. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.