U.S. Sugar Corporation
U.S. Sugar Clewiston Facility
Facility ID No. 0510003
Hendry County

Title V Air Operation Permit Renewal

Permit No. 0510003-065-AV
(Renewal of Title V Air Operation Permit No. 0510003-062-AV)

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: 850/717-9000
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Compliance Authority:
State of Florida
Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902-2549

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Title V Air Operation Permit Renewal

Permit No. 0510003-065-A V

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Section **Page Number**

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PERMITTEE:
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111 Ponce de Leon Avenue
Clewiston, Florida 33440-1207

Permit No. 0510003-065-AV
U.S. Sugar Clewiston Facility
Facility ID No. 0510003
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing U.S. Sugar Clewiston Facility is located in Hendry County at 111 Ponce de Leon Avenue in Clewiston, Florida. UTM Coordinates are: Zone 17, 506.1 kilometers (km) East, and 2956.9 km North. Latitude is: 26° 44' 6" North; and, Longitude is: 80° 56' 19" West.

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.

0510003-065-AV Effective Date: [ARMS Day 46]
Renewal Application Due Date: [Exp. Date - 225 days]
Expiration Date: [Effective Date + 5 years]

(Proposed)

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

DLR/sms

Subsection A. Facility Description.

The U.S. Sugar Clewiston Facility is a sugar mill and refinery. Raw materials (i.e., sugarcane) are transported to and received at the Clewiston Facility by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery and also for electric power generation. Molasses is also produced as a byproduct. Molasses is stored and either shipped off-site or processed into an animal feed product for sale.

Subsection B. Summary of Regulated Emissions Units.

The existing facility consists of the following emissions units.

EU No.	Brief Description
Sugar Mill	
014	Boiler 7
028	Boiler 8
044	Boiler 9
027	Biomass Handling and Storage
Sugar Refinery	
015	VHP Sugar Dryer
016	White Sugar Dryer No. 1
017	Granular Carbon Regeneration Furnace
018	Vacuum Pickup Systems
019	Conditioning Silos
020	Screening/Distribution and Sugar/Starch Bins
021	Alcohol Usage
022	Sugar Packaging Line
029	White Sugar Dryer No. 2
031	Limestone Storage Silo and Truck/Rail Handling System at the Sugar Refinery
043	Bulk Loadout Operations
045	Warehouse Hot Water Heater
Miscellaneous Ancillary Equipment	
010	Lime Silo with Baghouse at the Water Treatment Plant
030	Limestone Storage Silo with Baghouse at the Molasses Plant
033	Salt Silo with Baghouse at the Molasses Plant
036	Two Hydrogen Sulfide (H_2S) Degasification Systems
037	Emergency Reciprocating Internal Combustion Engine (RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WTP 2nd Floor Pump Room)
040	Emergency RICE (Gate D Generator)
042	Emergency RICE (Computer/IT Backup)

EU No.	Brief Description
041	Emergency RICE (WTP Plant Generator)
046	275 HP Emergency Diesel-Fired Generator
047	Six Propane-Fired Generators

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received on September 23, 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 60, Subpart A, NSPS General Provisions	014, 028, 044, 046, 047
40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	014, 028, 044
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	046
40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	047
40 CFR 63, Subpart A, NESHAP General Provisions	014, 028, 037-042, 044, 045
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	037-042
40 CFR 63, Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters.	014, 028, 044, 045
State Rule Citations	
Chapter 62-4, F.A.C.: Permits	All
Rule 62-204.800, F.A.C.; Federal Regulations Adopted by Reference	014, 028, 037-040, 044, 046, 047
Rule 62-212.400(PSD), F.A.C., Determinations of the Best Available Control Technology (BACT)	014, 015, 016, 017, 018-022, 027, 028, 029, 036, 043, 044
Rule 62-296.410, F.A.C., Carbonaceous Fuel Burning Equipment	014, 028, 044

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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. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), 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. Using covered conveyors on the carbonaceous fuel handling systems, which are in place;
b. Using enclosed material transfer points where feasible, which are in place;
c. Minimizing the distance carbonaceous fuel is dropped during handling;
d. Using windbreaks around the northwest bagasse storage pile;
e. Using water or wet sluicing to mitigate dust from boiler ash handling;
f. Applying water or approved dust suppressants to unpaved roads, yards, uncovered storage piles, and similar activities. Unless necessary to mitigate fire hazards or for other safety concerns, water should not be applied to bagasse or wood storage piles because these materials are used for boiler fuels;
g. Landscaping or planting of vegetation.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received September 23, 2024.]

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 US. 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://www.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).]

A summary of the required semi-annual reports for informational purposes is given in the table below.

Overall Facility		
Report	**Reporting Deadline**	**Related Condition(s) and Regulation(s)**
Title V Semi-Annual Report	Within 60 days after the end of each calendar half	Error! Reference source not found. [Rule 62-213.440(1)(b)3.a, F.A.C. & 40 CFR 70.6(a)(3)(iii)(A)]
Emissions Unit No. 014 - Boiler 7		
Report	**Reporting Deadline**	**Related Condition(s)**
Daily Operational Records	As requested by the Department	**A.33.**
Monthly Operations Summary	As requested by the Department	**A.34.**
Power Production	As requested by the Department	**A.35.**
Malfunction Notification Report (if requested)	Every 3-Months (Quarterly)	**A.37.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**A.38.**
NESHAP Excess Emission Report	Every 6-Months (Semiannually)	**A.39.**
Emissions Unit No. 028 - Boiler 8		
Report	**Reporting Deadline**	**Related Condition(s)**
Monthly Operations Summary	As requested by the Department	**B.27.**
Malfunction Notification Report (if requested)	Every 3-Months (Quarterly)	**B.29.a.**
SIP Excess Emissions Report	Every 3-Months (Quarterly)	**B.29.b.**
Actual Emissions Report	Each Calendar Year (Annually)	**B.30.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**B.31.**
NESHAP Excess Emission Report	Every 6-Months (Semiannually)	**B.32.**
Emissions Unit No. 044 - Boiler 9		
Report	**Reporting Deadline**	**Related Condition(s)**
Monthly Operations Summary	As requested by the Department	**C.31.**
Malfunction Notification Report (if requested)	Every 3-Months (Quarterly)	**C.32.a.**
SIP Excess Emissions Report	Every 3-Months (Quarterly)	**C.32.b.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**C.34.**
NESHAP Excess Emission Report	Every 6-Months (Semiannually)	**C.35.**

(See also Conditions RR2. - RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.)

{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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Subsection A. Emissions Unit 014

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

EU No.	Brief Description
014	Boiler 7

Boiler 7 is an Alpha Conal Model No. ATT-203-18 hybrid suspension-grate boiler with a vibrating grate. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter (PM) emissions are controlled by two parallel wet sand separators followed by an ABB electrostatic precipitator. Boiler 7 is classified as a "Hybrid Suspension Grate" (HSG) boiler under 40 CFR 63.7575.

Design Information: Boiler 7 has a maximum steam production rate of 385,000 pounds per hour at 750 degrees Fahrenheit (°F) and 600 pounds per square inch gauge (psig). Exhaust gases exit a stack that is 8.0 feet in diameter and 225 feet tall at 312 °F with an average flow rate of 296,657 actual cubic feet per meter (acfm).

{Permitting Note: Boiler 7 is subject to Rule 62-296.410, F.A.C., and Best Available Control Technology (BACT) determinations for PM, carbon monoxide (CO), sulfur dioxide (SO_2), sulfuric acid mist (SAM), volatile organic compounds (VOC) and nitrogen oxides (NO_X) in accordance with Rule 62-212.400(PSD), F.A.C. This emissions unit is also subject to the applicable provisions of 40 CFR 60, Subparts A (General Provisions) and Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. Boiler 7 is authorized to fire bagasse as the primary fuel with wood chips and distillate oil used as auxiliary fuels. Boiler 7 shall not exceed the permitted capacities specified in the following table.

Averaging Period	Steam Pressure [a]	Steam Temperature [a]	Steam Production (lb/hour)	Heat Input [b] (MMBtu/hour)	Wet Bagasse Firing [b] (tons/hour)
1-hour block	600 psig	750 °F	385,000	812	113
24-hour daily block	600 psig	750 °F	350,000	738	103

a. *Steam Parameters*. Steam temperature and pressure are design parameters. Changes to these parameters shall be reported to the Department and may require a permit modification.

b. *Bagasse Heat Input Parameters*. The maximum heat input and bagasse firing rates are estimated based on 55% thermal efficiency of the boiler; wet bagasse containing 55% moisture and a heat content of 3600 Btu/lb; and 1160 Btu (net) per pound of steam at 600 psig and 750° F with standard feed water conditions of 900 psig and 250° F.

c. *Distillate Oil Heat Input Parameters*. The maximum distillate oil firing rate is 2,417 gallons per hour, which produces approximately 225,000 pounds of steam per hour from the sole firing of distillate oil at a heat input rate of 326 million British thermal units per hour (MMBtu/hour).

d. *Wood Chip Burning Parameters*. Wood chips shall be fired at a heat input rate of no more than 369 MMBtu per hour based on a 24-hour daily block average. The heat input rate from firing wood chips shall not exceed 1,616,220 MMBtu during any consecutive 12 months (equivalent to 25% of the maximum annual heat input rate).

The permittee shall maintain continuous monitoring records of the steam temperature, steam pressure, and steam production rate.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-

208A), 031-AC (PSD-FL-389A) & 044-AC (PSD-FL-389); and, EPA alternative opacity monitoring plan approval dated February 1, 2008.]

A.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

A.3. Authorized Fuels. Boiler 7 is authorized to fire the following fuels.

a. *Bagasse*: The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.

b. *Wood Chips*: Wood chips may be fired as a startup and restricted auxiliary fuel. Wood chips shall consist of clean dry wood and vegetative materials. The wood chips shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited.

c. *Distillate Oil*: Any oil fired in this boiler shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. The oil firing system consists of multi-stage low-NO_X burners and a burner management control system.

d. *On-specification Used Oil*: Incidental amounts of on-specification used oil (≤0.05% sulfur by weight) generated on site may be co-fired.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A), 031-AC (PSD-FL-389A) &044-AC (PSD-FL-389).]

A.4. Hours of Operation. Boiler 7 operates primarily during the sugarcane crop season (October through April) and may operate during the off season (May through September) to support the sugar refinery. The hours of operation are not limited (8,760 hours per year); however, no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. [Rules 62-210.200(PTE) and 62-212.400(12), F.A.C.; 40 CFR 60.44b(l)(1); and Permit Nos. 0510003-018-AC & 029-AC (PSD-FL-208A).]

{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the SO_2 and NO_X standards in accordance with NSPS Subpart Db.}

Control Technology

A.5. Sand Separators. The permittee shall operate and maintain two wet sand separators to remove large particles prior to the electrostatic precipitator. [Rule 62-210.200(PTE); and Permit No. AC26-238006 (PSD-FL-208).]

*{Permitting Note: Permit No. 0510003-017-AV revised the description of the control technology seen in Specific Condition **A.5.** from settling chamber to sand separator. The wet sand is driven centrifugally into the lower inlet which enters the lower (settling) chamber of the sand separator.}*

A.6. Electrostatic Precipitator (ESP).

a. The permittee shall operate and maintain an electrostatic precipitator to achieve the PM standards specified in this subsection. The original design control efficiency is 98%. Exhaust from the outlet stack shall be maintained at a minimum of 225 feet in height. [Rule 62-210.200(PTE); and Permit No. AC26-238006 (PSD-FL-208).]

b. The permittee shall maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to 40 CFR 63.7530(b) and Table 7 to Subpart DDDDD of 40 CFR 63. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7530(b).]

A.7. Other Control Techniques.

a. *Low-Sulfur Fuels*: To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only

fire the authorized low-sulfur fuels specified in this subsection.

b. *Good Combustion Practices*: Appendix GCP of this permit specifies operational, maintenance and monitoring procedures that are generally applicable to all sugar mill boilers for maintaining good combustion.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit No. AC26-238006 (PSD-FL-208).]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **A.8. -A.16.** are based on the specified averaging time of the applicable test method. The "lb/hour" standards in the following conditions are based on the maximum 24-hour daily block average heat input rate.

A.8. CO Standards.

a. *Bagasse Firing BACT Standard:* As determined by EPA Method 10, CO emissions shall not exceed 0.70 lb/MMBtu of heat input, 516 lb/hour and 2,262 tons/year when firing bagasse. [Rule 62-212.400(BACT), F.A.C. and Permit No. AC26-238006 (PSD-FL-208).]

b. *Oil Firing BACT Standard*: As determined by EPA Method 10, CO emissions shall not exceed 0.066 lb/MMBtu of heat input, 21.5 lb/hour and 20.05 tons/year when firing oil. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. AC26-238006 (PSD-FL-208), 0510003-018-AC & 029-AC (PSD-FL-208A).]

c. *Federal Provision:* CO emissions shall not exceed 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

A.9. NO_X Standards. As determined by stack testing, NO_X emissions shall not exceed the following standards:

a. *Bagasse Firing:* As determined by EPA Methods 7 or 7E, NO_X emissions shall not exceed 0.25 lb/MMBtu of heat input, 185 lb/hour and 809 tons/year when firing bagasse. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. AC26-238006 (PSD-FL-208) & 0510003-006-AC.]

b. *Wood Chips Firing:* As determined by EPA Method 7E, NO_X emissions shall not exceed 0.31 lb/MMBtu of heat input and 228.8 lb/hour when firing wood chips alone or in combination with other fuels. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-044-AC (PSD-FL-389).]

c. *Oil Firing:* As determined by EPA Methods 7 or 7E, NO_X emissions shall not exceed 0.20 lb/MMBtu of heat input when firing distillate oil. No periodic testing for oil firing is required. [Rules 62-204.800(11)(b) & 40 CFR 60.44; and, Permit Nos. 0510003-018-AC & 029-AC (PSD-FL-208A).]

A.10. Opacity Standard. As determined by EPA Method 9, visible emissions shall not exceed 20% opacity based on a 6-minute average, except for one 6-minute period per hour that shall not exceed 27% opacity. This standard excludes water vapor and applies when firing any combinations of fuels. [Rules 62-204.800 & 62-212.400(BACT), F.A.C.; 40 CFR 60.43b(f); and, Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A), & 044-AC (PSD-FL-389).]

*{Permitting Note: Pursuant to Rule 62-296.410, F.A.C., Boiler 7 shall not exceed 30 percent opacity except, visible emissions not exceeding 33 percent opacity shall be allowed for one six-minute period in any one-hour period. However, this emissions unit demonstrates compliance with Rule 62-296.410, F.A.C. by complying with Specific Condition **A.10**.}*

A.11. PM/PM_{10} Standard.

a. As determined by EPA Method 5 or 17, PM emissions shall not exceed 0.030 lb/MMBtu of heat input, 22 lb/hour and 97 tons/year when firing any combinations of fuels. [Rules 62-204.800(8)(b) & 62-212.400(BACT), F.A.C.; 40 CFR 60.43b(g) & (h)(1); and, Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A) & 044-AC (PSD-FL-389).]

{Permitting Note: All PM shall be assumed to be PM_{10}.}

b. Filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

*{Permitting Note: Pursuant to Rule 62-296.410, F.A.C., Boiler 7 shall not exceed 0.2 lb/MMBtu for PM. However, this emissions unit demonstrates compliance with the all PM standards by complying with Specific Condition **A.11.a**.}*

A.12. SAM Standards. As determined by EPA Method 8, SAM emissions shall not exceed 0.017 lb/MMBtu of heat input, 13 lb/hour and 55 tons/year when firing bagasse. Compliance with the fuel sulfur specifications and SO_2 emissions limits shall serve as indicators of compliance. No periodic tests are required. [Rule 62-212.400(BACT), F.A.C. and Permit No. AC26-238006 (PSD-FL-208).]

A.13. SO_2 Standards. As determined by EPA Methods 6, 6C or 8, SO_2 emissions shall not exceed 0.17 lb/MMBtu, 125 lb/hour and 550 tons/year when firing any combinations of fuels. [Rules 62-204.800, and 62-212.400(BACT), F.A.C.; 40 CFR 60.43b; and, Permit Nos. AC26-238006 (PSD-FL-208) & 0510003-006-AC.]

A.14. VOC Standards. As determined by EPA Methods 18 and 25 or 25A, VOC emissions shall not exceed 0.212 lb/MMBtu of heat input, 157 lb/hour and 685 tons/year when firing bagasse. [Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. AC26-238006 (PSD-FL-208) & 0510003-031-AC.]

A.15. Hydrogen Chloride (HCl) Standard. Except during startup and shutdown, HCl emissions shall not exceed 2.2E-02 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 15 to Subpart DDDDD of 40 CFR 63.]

A.16. Mercury Standard. Except during startup and shutdown, mercury emissions shall not exceed 5.7E-06 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 15 to Subpart DDDDD of 40 CFR 63.]

A.17. Hydrogen Chloride (HCl) Standard. Beginning October 6, 2025, except during startup and shutdown, HCl emissions shall not exceed 2.0E-02 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

A.18. Mercury Standard. Beginning October 6, 2025, except during startup and shutdown, mercury emissions shall not exceed 5.4E-06 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 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.19. Excess Emissions. The following provisions regarding excess emissions resulting from startup, shutdown or malfunction shall only apply to unit-specific emission limits established on or before October 23, 2016, pursuant to Rules 62-212.400 and 62-212.500, F.A.C.

a. *Malfunction*. Excess emissions resulting from malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) 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.

b. *Startup or Shutdown*. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

c. *Prohibited*. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rules 62-210.700(1), (2) & (7), F.A.C.]

{Permitting Note: The Emission Limitations and Standards in Specific Conditions A.8.a., A.8.b., A.9.a., A.9.b., A.9.c., A.12., and A.14. are unit-specific emission limits established on or before October 23, 2016, pursuant to Rules 62-212.400 and 62-212.500, F.A.C.}

Monitoring of Operations

A.20. Monitoring Equipment. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate, and maintain the monitoring devices used to demonstrate compliance with the conditions of this permit, including: flow meters with integrators, pressure monitors, temperature monitors, strip chart recorders, oil flow meters, etc. Each device shall be calibrated at least annually. [Rule 62-212.400(PSD), F.A.C.; and Permit No. AC26-238006 (PSD-FL-208).]

A.21. Alternative Opacity Monitoring Plan. In lieu of the continuous opacity monitoring requirements of 40 CFR 60.48b, EPA Region 4 approved an alternative opacity monitoring plan as specified in the CAM provisions of this subsection. The Department may require the permittee to install and operate a continuous opacity monitoring system for failure to regularly comply with the opacity standard. [Rule 62-212.400(PSD), F.A.C.; 40 CFR 60.13(i) and 60.48b(a); Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A), & 044-AC (PSD-FL-389); and EPA approval dated February 1, 2008.]

A.22. Fuel Monitoring Requirements. The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix FM (Fuel Monitoring) for each authorized fuel. [Rules 62-212.400(PSD) & 62-213.440(2), F.A.C.; and, Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A) & 031-AC (PSD-FL-389A).]

A.23. CAM Plan, ESP. The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1
Indicator	Total ESP secondary power input
Measurement Approach	Total secondary power input is calculated from the secondary current and voltage to each ESP field as monitored with an amp/voltmeter.
Indicator Range	An excursion is defined as any total secondary power input **below 38 kW**. (3-hour block average). Excursions trigger inspection, corrective action, recordkeeping and reporting.
Data Representativeness	Accuracy of amp/voltmeter is ± 1 milliampere (mA) and ± 1 kilovolt (kV)
Verification of Operational Status	NA
QA/QC Procedures	Maintain equipment in accordance with manufacturer's recommendations.
Monitoring Frequency	Continuous monitoring of secondary current and voltage to each ESP field
Data Collection Procedures	Based on continuous monitoring data, calculate and record a 3-hour block average.
Averaging Period	3-hour block average

In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the ESP and corrective actions taken in the Daily Operational Records required by this permit.

[Rules 62-204.800 & 62-213.440(1)(b)1.a, F.A.C.; 40 CFR 64; and EPA Region 4 approval dated February 1, 2008.]

A.24. NESHAP Subpart DDDDD Work Practice Requirements. The permittee shall follow all applicable work practice standards in 40 CFR 63, Subpart DDDDD. These include the following:

a. *Annual Tune-up.* The permittee shall conduct an annual tune-up of the boiler, in accordance with 40 CFR 63.7540(a)(10). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7540(a)(10).]

b. *Startup*.

(1) The permittee shall operate all continuous monitoring systems during startup. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.a.]

(2) The permittee shall use one or a combination of clean fuels during startup. Of the authorized fuels in Specific Condition **A.3**, distillate oil and clean wood qualify as clean fuels for startup. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.b.]

(3) The permittee shall engage all pollution control devices in accordance with Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c.]

c. *Shutdown.*

(1) The permittee shall operate all continuous monitoring systems during shutdown. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

(2) The permittee may disengage pollution control devices only in a manner consistent with Table 3 to 40 CFR 63, Subpart DDDDD, Item 6. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

d. *SSP*. Develop and implement a written startup and shutdown plan (SSP). The SSP must be maintained onsite and made available for inspection when requested by the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7555.]

Test Methods and Procedures

A.25. 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
5	Method for Determining Particulate Matter Emissions
6 or 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
7 or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
17	Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates
25 or 25A	Method for Determining Gaseous Organic Concentrations
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

Method	Description of Method and Comments
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

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. [Rules 62-204.800 & 62-212.400(BACT), F.A.C.; 40 CFR 60.45b, 60.46b & 63.7520; and, Permit Nos. AC26-238006 (PSD-FL-208) & 0510003-006-AC.]

{Permitting Note: Bagasse contains low levels of mercury and requires an analytical method with low detection limit to obtain accurate results. Methods 1631 and 7473 have lower detection limits and are explicitly identified in EPA's response to public comments on Subpart DDDDD as those EPA would consider "equivalent", in accordance with the definition in 40 CFR 63.7575.}

A.26. Fuel Analysis Option for Hg and HCl. In lieu of stack tests for Hg or HCl, the permittee may perform monthly fuel analysis, in accordance with 40 CFR 63, Subpart DDDDD. [Rule 62-204.800(11)(b), F.A.C. and. 40 CFR 63.7505(c).]

*{Permitting Note: USSC complies with the Hg standard (seen in Specific Condition **A.16.**) through fuel analysis, not through stack testing, in accordance with Specific Condition **A.26.** If each of 12 consecutive monthly fuel analyses demonstrates 75% or less of the Hg compliance level, the permittee may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75% of the Hg compliance level or the permittee begins burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75% of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.}*

A.27. 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.}

A.28. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall conduct performance tests when firing bagasse for CO, NO_X, PM, VOC, HCl, Hg and opacity to demonstrate compliance with the applicable standards. If wood chips are fired during the federal fiscal year, separate compliance tests when firing wood are required for nitrogen oxides, particulate matter and visible emissions. Since bagasse is the worst-case fuel with regard to particulate matter, annual tests for particulate matter and visible emissions when firing bagasse may also be used to demonstrate compliance with the standards for firing wood chips. Tests for PM and opacity shall be conducted simultaneously unless approval is obtained from the Compliance Authority. [Rules 62-204.800(11)(b), 62-212.400(BACT) & 62-297.310(8), F.A.C.; 40 CFR 60.7515; and, Permit No. 0510003-018-AC, 029-AC (PSD-FL-208A) & 044-AC (PSD-FL-389).]

*{Permitting Note: USSC complies with the HCl standard (seen in Specific Condition **A.15.**) through periodic stack testing, as allowed in 40 CFR 63.7515(b), which permits a reduced frequency option of every 3 years if results are <75% of the standard for 2-consecutive years. If a stack test shows emissions exceeded the HCl limit or 75 percent of the emissions limit for HCl, the permittee shall conduct annual performance tests for*

HCl until all performance tests over a consecutive 2-year period meet the required level, pursuant to 40 CFR 63.7515(c).}

A.29. 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), in addition to the annual compliance tests specified above, compliance tests shall also be performed for CO, NO_X, PM, SO_2, VOC and opacity to demonstrate compliance with the applicable standards prior to renewing the Title V permit (at least every 5 years). Tests for PM and opacity shall be conducted simultaneously unless approval is obtained from the Compliance Authority. Before conducting any emissions tests for renewal, the permittee shall determine the thermal efficiency of the boiler using the ASME short-form or equivalent procedure. The results of the emissions and thermal efficiency tests shall be provided with the application to renew the operation permit. [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.; 40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e); and, Permit Nos. AC26-238006 (PSD-FL-208) & 0510003-005-AC.]

A.30. Parametric Monitoring for Tests. The permittee shall continuously monitor and record the oil flow rate and production rate, temperature and pressure of the steam. At no less than 15-minute intervals, permittee shall record the: flow rate to the wet cyclones; the flow rate, temperature and pressure of the feed water; and the amperage and voltage to the electrostatic precipitator. For each test run, the permittee shall monitor and record the bagasse firing rate. For each test run, the permittee shall calculate and record: the heat input rate based on the thermal efficiency and the steam and feedwater parameters; and the total power input to the electrostatic precipitator based on the monitored amperage and voltage. If the most recent thermal efficiency test indicates a thermal efficiency below 50%, the test results shall be used to determine the heat input rate from firing bagasse; otherwise, a default value of 55% may be used. [Rule 62-213.440(2), F.A.C. and Permit No. 0510003-031-AC (PSD-FL-389A).]

Recordkeeping and Reporting Requirements

A.31. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Daily Operational Records	As requested by the Department	**A.33.**
Monthly Operations Summary		**A.34.**
Power Production		**A.35.**
Malfunction Notification Report (*if requested*)	Every 3-Months (Quarterly)	**A.37.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**A.38.**
NESHAP Excess Emission Report		**A.39.**

[Rule 62-213.440(1)(b), F.A.C.]

A.32. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.33. Daily Operational Records. To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.

a. *Boiler Operations*: Chart recorders shall continuously record the steam pressure (psig), steam temperature (° F), and steam production rate (pounds per hour). Alternatively, the permittee may install an automated device to record these parameters.

b. *ESP Parameters*: The permittee shall maintain records of the amperage, voltage and total secondary power input to the electrostatic precipitator. The permittee shall comply with the CAM plan specified in this subsection as well as the general provisions in Appendix CAM of this permit.

c. *Wood Chip Usage Recordkeeping*. For each 24-hour block of operation (midnight to midnight), the permittee shall maintain records of the amount of wood chips fired to demonstrate compliance with the heat input restrictions of this permit.

d. *Wood Chips Heat Input Recordkeeping*. For each 24-hour block of operation (midnight to midnight), the permittee shall calculate and record the heat input rate from wood chips.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any.

[Rules 62-204.800(12) & 62-212.400(BACT), F.A.C.; 40 CFR 64; Permit No. 0510003-031-AC (PSD-FL-389A); and, EPA approval dated February 1, 2008.]

A.34. Monthly Operations Summary. Within ten calendar days of the end of each month, the permittee shall calculate and record the following information in a written or electronic log to demonstrate compliance with the performance requirements of this permit: hours of operation; steam production rate (lb); heat input rate (MMBtu); wet bagasse consumption rate (tons); total oil fired (gallons); and wood chips fired (tons). These records shall indicate the amounts for the previous month and the consecutive 12-month rolling total. Records shall be maintained on site and made available upon request. [Rules 62-204.800(11)(b), 62-212.400(PSD) & 62-213.440(2), F.A.C.; 40 CFR 63.7555(d)(1); and, Permit Nos. 0510003-018-AC, 029-AC (PSD-FL-208A) & 031-AC (PSD-FL-389A).]

*{Permitting Note: The data required in Specific Condition **A.34.** (Monthly Operations Summary) shall be accessible within the 10-calendar days. However, summary reports for aiding in compliance review can be completed during the semiannual reports.}*

A.35. Power Production. The permittee shall maintain records of the amount of any electrical power (MW) and the percentage of electrical power output distributed to any utility power distribution system. Power production records, on a calendar year basis, shall be retained by the owner for a minimum of five years from the date of the report and shall be made available to the Department upon request. [Rules 62-212.400(PSD), 62-213.440(1)b. & 62-213.440(2), F.A.C. and Permit No. AC26-238006 (PSD-FL-208).]

A.36. Test Notifications, Records and Reports - General Requirements. Appendix TR of this permit specifies the general requirements for test notifications, records and reports. For each test run, the report shall also indicate the total heat input rate, the heat input rate from firing each fuel, the steam production rate, and the secondary power input to the electrostatic precipitator. [Rules 62-213.440 & 62-297.310, F.A.C.; and, Permit No. 0510003-044-AC (PSD-FL-389).]

A.37. Malfunction Notification. If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of the following: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

Other Requirements

A.38. NSPS Provisions. Boiler 7 is subject to the New Source Performance Standards of Subparts A (General Provisions) and Db (Industrial-Commercial-Institutional Steam Generating Units) in 40 CFR 60. The permittee shall comply with all applicable requirements of NSPS Subpart Db. [Rule 62-204.800(8)(b), F.A.C.; and, 40 CFR 60, Subpart A & Subpart Db.]

A.39. NESHAP Provisions. Boiler 7 is subject to 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters). The permittee shall comply with all applicable requirements of NESHAP Subpart DDDDD. [Rule 62-204.800(11)(b), F.A.C.; and., 40 CFR 63 Subparts A and DDDDD.]

*{Permitting Note: Please see Facility-Wide Condition **FW9** (Semi-Annual Reports) of the Title V permit for an alternate report submittal deadline.}*

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

EU No.	Brief Description
028	Boiler 8

Boiler 8 is a membrane-wall hybrid suspension-grate boiler with travelling grate, over-fire air, rotating feeders, and pneumatic spreaders. The primary fuel is bagasse. Wood chips are fired as an alternate or supplemental fuel. Distillate oil is fired as a restricted alternate fuel for startup and supplemental uses. Bottom ash is removed to ash ponds by a submerged conveyor. Particulate matter is controlled by cyclone collectors followed by an ESP. Nitrogen oxides are reduced by a urea-based selective non-catalytic reduction system. Emissions of carbon monoxide and nitrogen oxides are monitored and recorded by continuous emissions monitoring systems (CEMS). Boiler 8 is classified as a HSG boiler under 40 CFR 63.7575.

Design Information: At a maximum design heat input rate of 1,077 MMBtu/hour (24-hour daily block average), the maximum continuous steam production is 575,000 pounds per hour (24-hour daily block average) of superheated steam at 600 psig and 750 °F for use in the sugar mill and refinery. Exhaust gases exit a stack with a diameter of 10.9 feet and a maximum height of 199 feet at 255 °F. At capacity, the approximate design flow rate is 437,000 acfm at 5.5% oxygen (245,258 dry standard cubic feet per minute (dscfm) at 7% oxygen).

{Permitting Note: Boiler 8 is subject to Rules 62-296.410, F.A.C., and Best Available Control Technology (BACT) determinations for NO_X, PM/PM_{10}, SAM, SO_2, and VOC in accordance with Rule 62-212.400(PSD), F.A.C. This emissions unit is also subject to the applicable provisions of 40 CFR 60, Subparts A (General Provisions) and Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. Rotating feeders, pneumatic spreaders, a traveling grate, and overfire air are used to fire the primary fuel of bagasse and/or wood chips. Low-NO_X burners are used to fire distillate oil as a restricted alternate fuel for startup and supplemental uses. The maximum oil firing rate is 4,161 gallons per hour (equivalent to 562 MMBtu per hour). Boiler 8 shall not exceed the following operational levels. Boiler 8 shall not exceed the permitted capacities specified in the following table.

Averaging Period	Steam Pressure [a]	Steam Temperature [a]	Steam Production (lb/hour)	Heat Input [b] (MMBtu/hour)
1-hour block	600 psig	750 °F	633,000*	1,185
24-hour daily block	600 psig	750 °F	575,000	1,077

* With a thermal efficiency of 62%, Boiler 8 is designed to generate 633,000 pounds per hour from a heat input rate of 1,185 MMBtu per hour (1-hour averages).

a. *Daily Steam Production Limit.* 13,800,000 pounds of steam per day (equivalent to 575,000 pounds of steam per hour and 1,077 MMBtu per hour based on 24-hour daily block averages);

b. *Annual Heat Input Limit for Wood Chips.* 2,830,356 MMBtu of heat input per consecutive 12 months from firing wood chips (equivalent to 30% of the maximum annual heat input rate);

c. *Daily Distillate Oil Limit*. 99,864 gallons of distillate oil per day (equivalent to 13,488 MMBtu per day); and,

d. *Annual Distillate Oil Limit*. 6,073,600 gallons of distillate oil per consecutive 12 months (equivalent to 819,936 MMBtu per year).

Note: The short-term restrictions form the basis of the Air Quality Analysis. The annual oil firing restriction results in an annual capacity factor of 10% or less, which avoids specific requirements in NSPS Subpart Db.

[Rules 62-213.440, 62-212.400(PSD) and 62-210.200(PTE), F.A.C.; NSPS Subpart Db; EPA alternative opacity monitoring plan approval dated May 13, 2008; and Permit Nos. 0510003-037-AC (PSD-FL-333C) & 063-AC (PSD-FL-333E)]

B.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

B.3. Authorized Fuels. Boiler 8 is authorized to fire the following fuels.

a. *Bagasse*. The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.

b. *Wood Chips*. Wood chips may be fired as a startup and auxiliary fuel. Wood chips shall consist of clean dry wood and vegetative materials. The wood chips shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited.

c. *Distillate Oil*. Any oil fired in this boiler shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight.

d. *On-specification Used Oil*. Incidental amounts of on-specification used oil (≤0.05% sulfur by weight) generated on site may be co-fired.

[Rules 62-212.400(PSD) & 62-210.200(PTE), F.A.C.; and Permit No. 0510003-037-AC (PSD-FL-333C).]

B.4. Hours of Operation. This emissions unit may operate continuously (i.e., 8,760 hours/year) without restriction. [Rules 62-212.400(PSD) & 62-210.200(PTE), F.A.C.; and Permit No. 0510003-037-AC (PSD-FL-333C).]

Control Technology

B.5. Air Pollution Control Equipment. Emissions from Boiler 8 are controlled by the following equipment.

a. *Cyclone Collectors*. The permittee shall operate and maintain cyclone collectors as a pre-control device prior to the ESP to remove entrained sand and large particles in the flue gas. The pre-control device prevents excessive equipment wear and overloading of the ESP. Two wet and one dry cyclone collectors are installed in parallel before the induced draft fan.

b. *ESP*. The permittee shall operate and maintain an electrostatic precipitator (ESP) to remove particulate matter from the flue gas exhaust and achieve the particulate matter standards specified in this permit. The ESP shall include an automated rapping system that can adjust rapping frequency and intensity to prevent re-entrainment of fly ash. The ESP shall be on line and functioning properly whenever bagasse and/or wood chips are fired. The permittee shall maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to 40 CFR 63.7530(b) and Table 7 to Subpart DDDDD of 40 CFR 63.

c. *SNCR*. The permittee shall operate and maintain a urea-based selective non-catalytic reduction (SNCR) system to reduce NO_X emissions in the flue gas exhaust and achieve the nitrogen oxides emissions standards specified in this permit. The system includes automated control of urea injection for at least three injection zones to respond to varying load and flue gas conditions. Urea injection rates and zones are determined based on parameters such as the current injection rate, furnace temperature profile, fuels, steam load, oxygen level, CO level and NO_X emissions.

[Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

B.6. Other Control Techniques. To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only fire the authorized low-sulfur fuels specified in this subsection. As provided in Appendix GCP of

this permit, operators shall follow the good combustion practices that are generally applicable to all sugar mill boilers. To the extent practicable, the permittee shall maintain the following flue gas levels as good combustion practices.

a. *Oxygen Levels*. The permittee shall maintain and operate a flue gas oxygen monitor on Boiler 8. When firing bagasse during normal operation, the oxygen content of the boiler exhaust is expected to range from 3% and 6%. High fuel moisture, high ash content, and low load conditions may result in higher flue gas oxygen contents (5% - 7%). When firing only distillate oil, the oxygen content of the boiler exhaust is expected to range from 4% to 5% due to tramp air required for cooling of the stoker, pneumatic distributors, and overfire air nozzles. Operators shall ensure that the flue gas oxygen content is sufficient for good combustion.

b. *CO Levels*. Carbon monoxide is an indicator of incomplete fuel combustion. In addition to insufficient oxygen, high fuel moisture, high ash content and low load conditions may result in elevated levels of carbon monoxide. When firing bagasse and/or wood chips during normal operation, the boiler exhaust CO content is expected to average approximately 400 ppmvd at 7% oxygen. The operator shall use the measured CO emissions at the stack as an indicator of the combustion efficiency and adjust boiler operating conditions as necessary. The stack exhaust is expected to be 1% - 2% oxygen content higher than the boiler exhaust due to infiltration from the entire system.

The stack exhaust oxygen content is expected to be 1% - 2% higher than the boiler exhaust due to infiltration from the entire system. When firing bagasse and/or wood chips, many factors may affect efficient combustion. The above levels represent adherence to good combustion practices under normal operating conditions. Operation outside these levels is not a violation in and of itself. Repeated operation beyond these levels without taking corrective actions to regain good combustion could be considered "circumvention" in accordance with Rule 62-210.650, F.A.C.

[Rules 62-210.200(PTE) & 62-212.400 (PSD), F.A.C.; and, Permit No. 0510003-037-AC (PSD-FL-333C).]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Condition **B.7.** is based on the specified averaging time of the applicable test method.

B.7. Standards Based on Compliance Tests. The following emission standards apply when firing bagasse, wood chips, distillate oil, or a combination of these fuels under normal operation at steady-state conditions. The mass emission rates (pounds per hour) are based on the maximum 24-hour daily block average heat input rate. Unless otherwise specified, compliance with these standards shall be based on the average of three test runs conducted under steady-state conditions at permitted capacity.

a. *Ammonia Slip Standard.* As determined by EPA Conditional Test Method CTM-027, ammonia slip shall not exceed 20 ppmvd at 7% oxygen. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

b. *CO Standard.* To the extent practicable, short term emissions of CO emissions shall be controlled by implementing the good combustion and operating practices identified in this subsection. In addition, CO emissions shall not exceed 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Rules 62-4.070(3) & 62-204.800(11)(b), F.A.C.; and, Table 2 to Subpart DDDDD of 40 CFR 63.]

c. *Opacity Standard.* As determined by COMS or EPA Method 9 observations, visible emissions shall not exceed 20% based on a 6-minute average. This standard excludes water vapor and applies when firing any combinations of fuels. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

d. *PM Standards.*

(1) *BACT Standard.* As determined by EPA Method 5 stack test, PM emissions shall not exceed 0.025 lb/MMBtu and 26.9 pounds per hour. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

(2) *NESHAP Standard.* Filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63]

(3) *NSPS Standard.* Filterable PM emissions shall not exceed 0.030 lb/MMBtu of heat input. [Rule 62-204.800(8)(b), F.A.C. and 40 CFR 60.48b.]

*{Permitting Note: Pursuant to Rule 62-296.410, F.A.C., Boiler 8 shall not exceed 0.2 lb/MMBtu for PM. However, this emissions unit demonstrates compliance with the all PM standards by complying with Specific Condition **B.7.d.(1)**.}*

e. *SO_2 Standard*: As determined by EPA Method 6C stack test, SO_2 emissions shall not exceed 0.06 lb/MMBtu and 64.6 pounds per hour. This emission standard serves as a surrogate for sulfuric acid mist (SAM) emissions. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

f. *VOC Standard*: As determined by EPA Methods 18 and 25A stack tests, VOC emissions shall not exceed 0.05 lb/MMBtu and 53.9 pounds per hour measured as propane. For this permit, "VOC" emissions shall be defined as the total hydrocarbons (THC) measured by EPA Method 25A less the sum of the methane and ethane emissions as measured by EPA Method 18 on a concurrent sample. Alternatively, the permittee may elect to assume that all THC are regulated VOC emissions. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

g. *HCl Standard.* Except during startup and shutdown, HCl emissions shall not exceed 2.2E-02 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 15 to Subpart DDDDD of 40 CFR 63.]

h. *Mercury Standard.* Except during startup and shutdown, mercury emissions shall not exceed 5.7E-06 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 15 to Subpart DDDDD of 40 CFR 63.]

i. *HCl Standard.* Beginning October 6,2025, except during startup and shutdown, HCl emissions shall not exceed 2.0E-02 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

j. *Mercury Standard*. Beginning October 6, 2025, except during startup and shutdown, mercury emissions shall not exceed 5.4E-06 lb per MMBtu of heat input. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

{Permitting Note: The standards for ammonia slip, opacity, PM, SO_2 and VOC are BACT standards. The SO_2 standard also serves as a surrogate BACT for SAM emissions.}

B.8. Standards Based on CEMS. The following emission standards apply when firing bagasse, wood chips, distillate oil or a combination of these fuels and under all load conditions.

a. *CO Standards*.

(1) *PSD-Avoidance Standard.* As determined by CEMS data, CO emissions shall not exceed 1,285 tons during any consecutive 12 months including periods of startup, shutdown and malfunction. Compliance with the annual mass emission standard ensures that the original AC project is not subject to PSD preconstruction review for CO emissions. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

(2) *NESHAP Standard.* CO emissions shall not exceed 900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average. [Rule 62-204.800(11)(b), F.A.C. and Table 2 to Subpart DDDDD of 40 CFR 63.]

b. *NO_X Standard*. As determined by CEMS data, NO_X emissions shall not exceed 0.14 lb/MMBtu based on a 30-day rolling average. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-

333C).]

Excess Emissions

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

B.9. Excess Emissions for CO, NO_X, and Opacity. As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions supersede the provisions in Rule 62-210.700(1), F.A.C.

a. *CO Emissions*.

(1) Each 12-month rolling total shall include all valid CEMS data including startup, shutdown and malfunction.

(2) For the purposes of demonstrating compliance with the CO limit of **B.8.a.(2)**. The procedures contained in 40 CFR 63 Subpart DDDDD shall be utilized.

b. *NO_X Emissions*. NO_X CEMS data collected during startup, shutdown, malfunction and authorized periods of uncontrolled NO_X monitoring (item #4 below) may be excluded from the determination of compliance with the 30-day rolling emissions standard, provided:

(1) Best operational practices are used to minimize emissions;

(2) For startups and shutdowns, the SNCR system has not yet attained proper operating conditions and is not functional;

(3) For malfunctions, excluded data shall not exceed two hours in any 24-hour daily block period (up to eight 15-minute CEMS blocks or quadrants of an hour). The permittee shall notify the Compliance Authority within one working day of detecting the malfunction; and

(4) For two hours each month, the permittee may operate the boiler without the SNCR system in order to collect uncontrolled NO_X emissions data with the CEMS. For purposes of collecting uncontrolled NO_X emissions data to adjust the SNCR system, excluded data shall not exceed two, 1-hour values during any calendar month. Based on the final design specifications, uncontrolled NO_X emissions are expected to be 0.30 lb/MMBtu. Uncontrolled NO_X data collected during these periods will be used to adjust the SNCR system as necessary.

c. *Opacity*. During startup and shutdown, the stack opacity shall not exceed 20% opacity based on a 6-minute block average, except for one 6-minute block per hour that shall not exceed 27% opacity. This alternate opacity standard does not impose a separate annual testing requirement.

CO and NO_X CEMS data excluded due to startup, shutdown, malfunction or authorized periods of uncontrolled NO_X monitoring shall be summarized and reported in the "Quarterly CO and NO_X Emissions Report" required by this permit.

[Rules 62-210.700(5) & 62-212.400 (PSD), F.A.C.; and, Permit No. 0510003-037-AC (PSD-FL-333C).]

{Permitting Note: Because compliance is continuously demonstrated by CEMS data, allowances for CO and NO_X are provided during specific periods of operation in which the control device or technique may not be fully functional. Similarly, an alternate standard is identified for opacity during startup and shutdown because compliance is readily observable. As SO_2 emissions are a function of the fuel sulfur, it is not expected that startups or shutdowns would cause excess emissions of this pollutant. During startups and shutdowns, it is possible that PM and VOC emissions could exceed the "lb/MMBtu" emissions standards. However, there is reason to believe that the mass emission rates (lb/hour) of these pollutants will not exceed the specified standards due to the reduced fuel firing rates. In any case, the specified test methods are generally applicable only during steady-state operation. Therefore, no alternate emissions standards are specified and compliance shall be determined by the test methods and procedures specified in this subsection. The Department's rules and permits cannot waive or supersede a federal requirement.}

B.10. Excess Emissions. The following provisions regarding excess emissions resulting from startup, shutdown or malfunction shall only apply to unit-specific emission limits established on or before October 23, 2016, pursuant to Rules 62-212.400 and 62-212.500, F.A.C.

a. *Malfunction*. Excess emissions resulting from malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) 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.

b. *Startup or Shutdown*. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

c. *Prohibited*. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rules 62-210.700(1), (2) & (7), F.A.C.]

{Permitting Note: The Emission Limitations and Standards in Specific Conditions B.7.a., B.7.c., B.7.d.(1), B.7.e., and B.7.f are unit-specific emission limits established on or before October 23, 2016, pursuant to Rules 62-212.400 and 62-212.500, F.A.C. The Emission Limitations and Standards In Specific Condition B.8 are addressed by Specific Condition B.9.}

Monitoring of Operations

B.11. CEMS. The permittee shall calibrate, operate and maintain continuous emission monitoring systems (CEMS) to measure and record concentrations of CO, NO_X, and oxygen in the exhaust of Boiler 8 in a manner sufficient to demonstrate continuous compliance with the CEMS standards specified in this permit. The permittee shall notify the Compliance Authority within one working day of discovering emissions in excess of a CEMS standard subject to the specified averaging period.

a. *CO Monitors*. The CO monitor shall meet the requirements of Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. For the purposes of compliance with 40 CFR 63 Subpart DDDDD, the CO monitor shall meet the requirements of 40 CFR 63.7525 (a).

b. *NO_X Monitors*. The NO_X monitor shall meet the requirements of Performance Specification 2 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. NO_X shall be expressed "as NO_2." Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. The monitor shall have a maximum span value of 250 ppmvd.

c. *Diluent Monitors*. An oxygen monitor shall be installed at each CO and NO_X monitor location to correct measured CO and NO_X emissions to the required oxygen concentrations. The oxygen monitor shall meet the requirements of Performance Specification 3 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 3A in Appendix A of 40 CFR 60. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. For the purposes of compliance with 40 CFR 63 Subpart DDDDD, the CO monitor shall meet the requirements of 40 CFR 63.7525 (a).

d. *1-Hour Averages*. Each 1-hour block average shall begin at the top of an hour. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the 1-hour average is not valid. Except for data authorized to be excluded, the

permittee shall use all valid measurements or data points collected during an hour to calculate the 1-hour averages. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour. If the CEMS measures concentration on a wet basis, the permittee shall use at least one of the following methods:

(1) The CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture), or

(2) The permittee may estimate the flue gas moisture content as 26.0% for the crop season (high load operation) and 22.7% for the off-crop season (low-load operation).

For the purposes of demonstrating compliance with the CO limit in Specific Condition **B.8.a.(2)**. The following must be performed:

(3) Complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect CO and oxygen data concurrently. Collect at least four CO and oxygen CEMS data values representing the four 15- minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

(4) Reduce the CO CEMS data as specified in 40 CFR 63.8(g)(2).

(5) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentration. The one-hour arithmetic averages required Shall be used to calculate the 30-day rolling average emissions. Use Equation 19-19 in Section 12.4.1 of Method 19 of 40 CFR part 60, Appendix A-7 for calculating the average CO concentration from the hourly values.

(6) For purposes of collecting CO data, operate the CO CEMS as specified in 40 CFR 63.7535(b). All the data collected during all periods must be used in calculating data averages and assessing compliance, except for certain data as specified in 40 CFR 63.7535(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in 40 CFR 63.7535(d).

e. *Data Exclusion.* Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Certain emissions data recorded during specifically defined episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Specific Condition **B.9**. in this subsection. All periods of data excluded shall be consecutive for each such episode. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

f. *30-Day Averages.* The 30-day rolling average shall be determined by averaging all 1-hour averages for 30 successive boiler operating days. A boiler operating day begins and ends at midnight of each day and includes any day that fuel is combusted. Final results shall be recorded in terms of the applicable emissions standard. For the purposes of demonstrating compliance with the CO limit in Specific Condition **B.8.a.(2)**, each 30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data as defined in 40 CFR 63.7575.

g. *CO Emissions Cap*. For each day (midnight to midnight), the CEMS shall record the total CO mass emissions rate (pounds per day). The 12-month rolling total shall be the sum of the daily mass emission rates reported as "tons per consecutive 12 months".

h. *Availability*. Monitor availability for each CEMS shall be 95% or greater in any calendar quarter. The quarterly excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor

availability shall be violations of this permit, except as otherwise authorized by the Department's Compliance Authority.

[Rules 62-213.440(2) & 62-204.800(11)(b), 62-212.400 (PSD), F.A.C. and Permit Nos. 0510003-037-AC (PSD-FL-333C) & 047-AC.]

B.12. Alternative Opacity Monitoring Plan. In lieu of the continuous opacity monitoring requirements of 40 CFR 60.48b, EPA Region 4 approved an alternative opacity monitoring plan as specified in the CAM provisions of this subsection. The Department may require the permittee to install and operate a continuous opacity monitoring system for failure to regularly comply with the opacity standard. [Rules 62-204.800(8)(b) & 62-212.400(PSD), F.A.C.; 40 CFR 60.13(i) & 60.48b(a); Permit No. 0510003-037-AC (PSD-FL-333C); and, EPA approval dated May 13, 2008.]

B.13. SNCR Urea Injection. In accordance with the manufacturer's specifications, the permittee shall calibrate, operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

B.14. Cyclones. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain the following equipment: flow meter to monitor the water flow rate (gph) for each wet cyclone and a manometer (or equivalent) to monitor the pressure drop (inches of water) across each cyclone. During each stack test conducted, the flow rate and pressure drop shall be observed at 15-minute intervals and recorded in a written log. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-031-AC (PSD-FL-333D).]

B.15. Steam Parameters. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain continuous monitoring and recording devices for the following parameters: steam temperature (°F), steam pressure (psig), and steam production rate (lb/hour). Records shall be maintained on site and made available upon request. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

B.16. Fuel Monitoring Requirements. The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix FM (Fuel Monitoring) for each authorized fuel. [Rules 62-210.370(3), & 62-212.400 (PSD), F.A.C. and Permit No. 0510003-031-AC (PSD-FL-333D).]

B.17. CAM Plan for ESP. The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1
Indicator	Total ESP secondary power input
Measurement Approach	Total secondary power input is calculated from the secondary current and voltage to each ESP field as monitored with an amp/voltmeter.
Indicator Range	An excursion is defined as any total secondary power input **below 25 kW (3-hour block average) during the crop season (October through April) and 18 kW (3-hour block average) during the off season (May through September)**. Excursions trigger inspection, corrective action, record keeping and reporting.
Data Representativeness	Accuracy of amp/voltmeter is ± 1 milliampere (mA) and ± 1 kilovolt (kV)
Verification of	NA

CAM Criteria	Indicator #1
Operational Status	
QA/QC Procedures	Maintain equipment in accordance with manufacturer's recommendations.
Monitoring Frequency	Continuous monitoring of secondary current and voltage to each ESP field.
Data Collection Procedures	Based on continuous monitoring data, calculate and record a 3-hour block average.
Averaging Period	3-hour block average

In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the ESP and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and 40 CFR 64.]

B.18. NESHAP Subpart DDDDD Work Practice Requirements. The permittee shall follow all applicable work practice standards in 40 CFR 63, Subpart DDDDD. These include the following:

a. *Annual Tune-up.* The permittee shall conduct an annual tune-up of the boiler, in accordance with 40 CFR 63.7540(a)(10). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7540(a)(10).]

b. *Startup*.

(1) The permittee shall operate all continuous monitoring systems during startup. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.a.]

(2) The permittee shall use one or a combination of clean fuels during startup. Of the authorized fuels in Specific Condition **B.3**, distillate oil and clean wood qualify as clean fuels for startup. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.b.]

(3) The permittee shall engage all pollution control devices in accordance with Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c.]

c. *Shutdown.*

(1) The permittee shall operate all continuous monitoring systems during shutdown. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

(2) The permittee may disengage pollution control devices only in a manner consistent with Table 3 to 40 CFR 63, Subpart DDDDD, Item 6. [Rule 62-204.800(11)(b), F.A.C.; and., Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

d. *SSP*. Develop and implement a written startup and shutdown plan (SSP). The SSP must be maintained onsite and made available for inspection when requested by the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7555.]

Test Methods and Procedures

B.19. Test Methods. If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

EPA Method	Description of Method and Comments

EPA Method	Description of Method and Comments
CTM-027	Measurement of Ammonia Slip. This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions from Stationary Sources
6C	Measurement of SO_2 Emissions (Instrumental)
7E	Measurement of NO_X Emissions (Instrumental)
9	Visual Determination of the Opacity
10	Measurement of Carbon Monoxide Emissions (Instrumental). The CO test method shall be based on a continuous sampling train. See Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.
19	Calculation Method for NOx, PM, and SO_2 Emission Rates. Method may be used to supplement other methods.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "http://www.epa.gov/ttn/emc/ctm.html". The other methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 & 62-212.400(BACT), F.A.C.; 40 CFR 60.45b, 60.46b & 63.7520; and, Permit No. 0510003-037-AC (PSD-FL-333C).]

{Permitting Note: Bagasse contains low levels of mercury and requires an analytical method with low detection limit to obtain accurate results. Methods 1631 and 7473 have lower detection limits and are explicitly identified in EPA's response to public comments on Subpart DDDDD as those EPA would consider "equivalent", in accordance with the definition in 40 CFR 63.7575.}

B.20. Fuel Analysis Option for Hg and HCl. In lieu of stack tests for Hg or HCl, the permittee may perform monthly fuel analysis, in accordance with 40 CFR 63, Subpart DDDDD. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7505(c).]

*{Permitting Note: USSC complies with the Hg standards (seen in Specific Conditions **B.7.h.** and **j.**) through fuel analysis, not through stack testing, in accordance with Specific Condition **B.20.** If each of 12 consecutive monthly fuel analyses demonstrates 75% or less of the Hg compliance level, the permittee may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75% of the Hg compliance level or the permittee begins burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75% of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.}*

B.21. 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.]

B.22. Annual Stack Tests. During each calendar year (January 1st to December 31st), the permittee shall conduct compliance stack tests for ammonia slip, HCl, mercury, PM, VOC and opacity. The permittee may elect to perform compliance testing for HCl and mercury using fuel analysis. Tests shall be conducted between 90% and 100% of the maximum 24-hour continuous heat input rate when firing only bagasse or bagasse with wood chips. Data from the CO CEMS shall be reported for each run of the required tests for NO_X and VOC emissions. Data from the NO_X CEMS shall be reported for each run of the required tests for ammonia slip. The Department may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. [Rules 62-212.400 (PSD) and 62-297.310(8), F.A.C.; 40 CFR 63.7515(b), (c) & (e), 40 CFR 63.7520(e); and, Permit Nos. 0510003-031-AC (PSD-FL-333D) & 037-AC (PSD-FL-333C).]

*{Permitting Note: USSC complies with the HCl standard (seen in Specific Condition **B.7.g.**) through periodic stack testing, as allowed in 40 CFR 63.7515(b), which permits a reduced frequency option of every 3 years if results are <75% of the standard for 2-consecutive years. If a stack test shows emissions exceeded the HCl limit or 75 percent of the emissions limit for HCl, the permittee shall conduct annual performance tests for HCl until all performance tests over a consecutive 2-year period meet the required level, pursuant to 40 CFR 63.7515(c).}*

B.23. 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), before renewal of this Title V air operation permit, the permittee shall conduct a compliance test for opacity, SO_2, CO, and PM emissions when firing only bagasse. In addition, the permittee shall determine the thermal efficiency of the boiler when firing only bagasse using the ASME short-form or equivalent procedure before conducting the SO_2 test and any required annual compliance tests in the year before renewal of the Title V air operation permit. The results of the emissions and thermal efficiency tests shall be provided with the application to renew the Title V air operation permit. [Rules 62-210.300(2)(a), 62-204.800(11)(b) & 62-297.310(8)(b), F.A.C.; 40 CFR 63.7515; and, Permit No. 0510003-031-AC (PSD-FL-333D).]

B.24. Parametric Monitoring for Tests. The permittee shall continuously monitor and record the oil flow rate and production rate, temperature and pressure of the steam. At no less than 15-minute intervals, permittee shall record the: flow rate and pressure drop to the wet cyclones; the flow rate, temperature and pressure of the feed water; and the amperage and voltage to the electrostatic precipitator. The bagasse and wood chip fuel firing rate (tons per hour) shall be calculated and recorded based on the steam parameters and the heating value of this fuel. For each test run, the permittee shall calculate and record: the heat input rate based on the thermal efficiency and the steam and feedwater parameters; and the total power input to the electrostatic precipitator based on the monitored amperage and voltage. The actual heat input rate shall be determined using two methods: (a) steam parameters with enthalpies and the measured thermal efficiency, and (b) steam parameters with enthalpies and the boiler thermal efficiency. If the most recent thermal efficiency test indicates a thermal efficiency below 56%, the test results shall be used to determine the heat input rate from firing bagasse; otherwise, a default value of 62% may be used. [Rule 62-297.310(10), F.A.C.; and Permit No. 0510003-037-AC (PSD-FL-333C).]

Recordkeeping and Reporting Requirements

B.25. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)

Report	Reporting Deadline	Related Condition(s)
Monthly Operations Summary	As requested by the Department	**B.27.**
Malfunction Notification Report (*if requested*)	Every 3-Months (Quarterly)	**B.29.a.**
SIP Excess Emissions Report		**B.29.b.**
Actual Emissions Report	Each Calendar Year (Annually)	**B.30.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**B.31.**
NESHAP Excess Emission Report		**B.32.**

[Rule 62-213.440(1)(b), F.A.C.]

B.26. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

B.27. Monthly Operations Summary. By the tenth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month of operation: hours of operation, distillate oil consumption, pounds of steam per month, and the updated 12-month rolling totals for each of these operating parameters. The Monthly Operations Summary shall be maintained on site and made available for inspection when requested by the Department. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

*{Permitting Note: The data required in Specific Condition **B.27.** (Monthly Operations Summary) shall be accessible within the 10-calendar days. However, summary reports for aiding in compliance review can be completed during the semiannual reports.}*

B.28. Test Notifications, Records and Reports - General Requirements. Appendix TR of this permit specifies the general requirements for test notifications, records and reports. In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: steam production rate (lb/hour), heat input rate (MMBtu/hour), calculated bagasse firing rate (tons/hour), wood chip firing rate (tons/hour), and emission rates (lb/MMBtu and ppmvd at 3% or 7% oxygen, as applicable). [Rules 62-212.400 (PSD)& 62-297.310, F.A.C.; and, Permit No. 0510003-037-AC (PSD-FL-333C).]

B.29. Excess Emissions Reporting.

a. *Malfunction Notification*. If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of the following: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rules 62-4.130 & 62-210.700(6), F.A.C.]

b. *Quarterly Report - CO and NOx Emissions*. Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing CO and NO_X emissions including periods of startups, shutdowns, malfunctions, authorized uncontrolled NO_X emissions monitoring and CEMS systems monitor availability for the previous quarter. If CO or NO_X CEMS data is excluded from a compliance determination during the quarter due to a malfunction, the permittee shall include a description of the malfunction, the actual emissions recorded, and the actions taken to correct the malfunction. See Appendix RR of this permit for the reporting format. [Rule 62-212.400(PSD), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

B.30. Actual Emissions Reporting. Permit No. 0510003-063-AC (PSD-FL-333E) 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. *{Permitting Note: The last report is due early 2025.}*

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 per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the authorized change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TR of this permit.

b. The permittee shall report to the Department's permitting and compliance authority 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 TR 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 TR of this permit. For this project, the permittee shall use the CEMS in reporting the actual annual CO and NO_X emissions for Boiler 8.

e. Baseline emissions of CO and NO_X were determined to be 858 TPY and 409 TPY, respectively. The demand growth emissions were also determined to be 164 TPY for CO and 27.6 TPY for NO_X emissions.

[Rules 62-212.300(1)(e) & 62-210.370, F.A.C; and, Permit No. No. 0510003-063-AC (PSD-FL-333E).]

Other Requirements

B.31. NSPS Provisions. Boiler 8 is subject to the New Source Performance Standards of Subparts A (General Provisions) and Db (Industrial-Commercial-Institutional Steam Generating Units) in 40 CFR 60. The permittee shall comply with all applicable requirements of NSPS Subpart Db. [Rule 62-204.800(8)(b), F.A.C.; and, 40 CFR 60, Subpart A & Subpart Db.]

B.32. NESHAP Provisions. Boiler 8 is subject to 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters). The permittee shall comply with all applicable requirements of NESHAP Subpart DDDDD. [Rule 62-204.800(11)(b), F.A.C.; and., 40 CFR 63 Subparts A and DDDDD.]

*{Permitting Note: Please see Facility-Wide Condition **FW9** (Semi-Annual Reports) of the Title V permit for an alternate report submittal deadline.}*

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Subsection C. Emissions Unit 044

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

EU No.	Brief Description
044	Boiler 9

Boiler 9 is a hybrid suspension-grate boiler with a design maximum heat input rate of 1,077 MMBtu/hour, on a 24-hour basis, and 1,185 MMBtu/hour on a 1-hour basis. The primary fuel for the boiler is bagasse, while wood is used as an auxiliary fuel, and natural gas is also be used as an auxiliary fuel and as a clean fuel for startups and shutdowns. The average heating value of bagasse is approximately 3,600 Btu/lb, while the average heating value of wood is approximately 4,070 Btu/lb.

The boiler is equipped with an SNCR for control of NO_X. The boiler also employs two wet sand separators and an ESP for control of PM emissions.

Design Information: The stack for the unit has the following nominal parameters: stack height, 213 ft.; exit diameter, 10.9 ft; exit temperature, 255 °F; water vapor content, 24%; volumetric flow rate, 383,005 acfm; maximum dry standard flow rate, 191,936 dscfm.

{Permitting Note: Boiler 9 is subject to Rule 62-296.410, F.A.C., and Best Available Control Technology (BACT) determinations for NO_X, $PM_{2.5}$, SAM, SO_2, and greenhouse gases (GHG) in accordance with Rule 62-212.400(PSD), F.A.C. This emissions unit is also subject to the applicable provisions of 40 CFR 60, Subparts A (General Provisions) and Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. Boiler 9 has nominal maximum hourly heat input capacity of 1,185 MMBtu/hour and nominal hourly steam production rate of 633,000 lb/hour. The primary fuel for the boiler is bagasse, with clean wood authorized as an auxiliary fuel. Natural gas is used as an auxiliary fuel and as a startup fuel. The boiler is used to provide steam and electricity to the Clewiston Mill. Boiler 9 shall not exceed the permitted capacities specified in the following table.

Averaging Period	Steam Pressure	Steam Temperature	Steam Production (lb/hour) [a, d]	Heat Input [b] (MMBtu/hour)
1-hour block	600 psig	750 °F	633,000	1,185
24-hour daily block	600 psig	750 °F	575,000	1,077

a. *Daily Steam Production*: Steam production shall not exceed 13,800,000 pounds per calendar day, 24-hour block average (equivalent to 575,000 pounds of steam per hour and 1,077 MMBtu/hour).

b. *Hourly Heat Input:* The maximum permitted design one-hour heat input rate from all fuels, combined, is 1,185 MMBtu/hour.

c. *Natural Gas:* The maximum permitted design one-hour heat input rate from natural gas is 562 MMBtu/hour.

d. *Hourly Steam Production*: The maximum permitted design one-hour steam production rate is 633,000 lb/hour.

[Rules 62-4.160(2), 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

C.3. Authorized Fuels. The only authorized fuels for this boiler are bagasse, clean wood, and natural gas. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.4. Hours of Operation. The hours of operation of are not limited (*i.e.*, 8,760 hours per year). [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

Control Technology

C.5. Overfire Air. The permittee shall operate and maintain an overfire air system on Boiler No. 9. This system will utilize staged combustion to reduce emissions of NO_X. [Rule 62-212.400(10)(BACT), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

C.6. Selective Non-Catalytic Reduction. The permittee shall operate and maintain a SNCR system on Boiler No. 9. This system will utilize urea injection to achieve compliance with all applicable emission limits for NO_X. [Rule 62-212.400(10)(BACT), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

C.7. Wet Sand Separators. The permittee shall operate and maintain wet sand separators as a pre-control device prior to the induced-draft fan and ESP to remove entrained sand and large particles in the flue gas. The pre-control device prevents excessive equipment wear and overloading of the ESP. [Rule 62-212.400(10)(BACT), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

C.8. Electrostatic Precipitator. The permittee shall operate and maintain an ESP to remove particulate matter from the flue gas exhaust and achieve the particulate matter standards specified in this permit. The ESP shall include an automated rapping system to prevent re-entrainment of fly ash. The ESP shall be on line and functioning properly whenever bagasse and/or wood chips are fired. [Rule 62-212.400(10)(BACT), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435.)]

C.9. Circumvention. The permittee shall not circumvent the air pollution control equipment or allow emissions in excess of the emission standards of this subsection without this equipment operating properly. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Condition **C.10.** are based on the specified averaging time of the applicable test method.

C.10. Emissions Standards. Emissions from Boiler No. 9 shall not exceed the following standards:

Pollutant	Emission Standard	Basis	Compliance Method	Averaging Time [a]
NO_X	0.10 lb/MMBtu	Primary BACT (Rule 62-212.400(BACT), F.A.C.)	NO_X CEMS	30-operating-day rolling
	130 lb/hr			Daily block
	0.20 lb/MMBtu	NSPS Subpart Db, Secondary BACT (40 CFR 60.44b(l)(1), Rule 62-212.400(BACT), F.A.C.)		30-operating-day rolling, including startup, shutdown, and malfunction
	471.7 tons per year	Applicant Request		12-operating-month rolling, including startup, shutdown, and malfunction

Subsection C. Emissions Unit 044

Pollutant	Emission Standard	Basis	Compliance Method	Averaging Time [a]
SO_2	0.064 lb/MMBtu	BACT (Rule 62-212.400(BACT), F.A.C.)	Annual stack tests	Three 1-hr runs
SAM	Compliance demonstrated through compliance with SO_2 limit. (Rule 62-212.400(BACT), F.A.C.)			
GHGs (CO_2)	0.49 lb/lb steam	BACT (Rule 62-212.400(BACT), F.A.C.)	CO_2 CEMS (or O_2 monitor with F-factor correction) [b]	12-operating-month rolling, including startup, shutdown, and malfunction
Filterable PM [c]	0.030 lb/MMBtu	NSPS Subpart Db (40 CFR 60.43b(h)(1))	Stack tests. See **Specific Condition C.27.b**.	Three 1-hr runs
	0.026 lb/MMBtu	NESHAP Subpart DDDDD (Table 14, Row 13)		
$PM_{2.5}$ (filterable & condensable)	0.0268 lb/MMBtu	BACT (Rule 62-212.400(BACT), F.A.C.)	Annual stack tests. See **Specific Condition C.26**.	
Visible Emissions (VE) [c]	20 percent opacity [d]	NSPS Subpart Db (40 CFR 60.43b(f)), BACT (Rule 62-212.400(BACT), F.A.C.	COMS or initial and subsequent stack tests	See **Specific Condition C.27.c**.
HCl	0.022 lb/MMBtu	NESHAP Subpart DDDDD (Table 14, Row 1)	Stack tests, monthly fuel sampling, or CEMS [e]	
Hg	8.0 x 10^{-7} lb/MMBtu	NESHAP Subpart DDDDD (Table 14, Row 1)	Stack tests, monthly fuel sampling, or CEMS [f]	
CO	900 ppmvd at 3% O_2 [g]	NESHAP Subpart DDDDD (Table 14, Row 13)	CO CEMS	30-operating-day rolling, including malfunctions
NH_3	25 ppmvd at 7% O_2 [h]	BACT (Rule 62-212.400(BACT), F.A.C.)	Annual stack tests	Three 1-hr runs

a. Unless otherwise specified, averaging periods do not include periods of startup, shutdown, or documented malfunction.
b. Emissions of non-CO_2 GHGs are expected to be negligible for this boiler.
c. Rule 62-296.410, F.A.C., includes limits on filterable PM and VE for biomass-fueled boilers. However, the PM limits in this rule are less stringent than the PM limits in Subpart Db. Demonstrating compliance with Subparts Db and DDDDD is sufficient for demonstrating compliance with Rule 62-296.410, F.A.C., for PM. Additionally, following the Subpart DDDDD work practice requirements assures that there is an effective limitation on these pollutants at all times.
d. Subpart Db imposes an opacity limit of 20 percent, except for one 6-minute period per hour of not more than 27 percent opacity. By 40 CFR 60.43b(g), this limit does not apply during periods of startup, shutdown, or malfunction.
e. The permittee has indicated the intention to demonstrate compliance with the HCl limit through annual stack tests.
f. The permittee has indicated the intention to demonstrate compliance with the Hg limit through monthly fuel sampling, pursuant to 40 CFR 63.7505(c), 63.7515(e), and 63.7530(c).
g. Parts per million by volume, dry, corrected to 3% O_2. For the purposes of demonstrating compliance with the CO limit, the procedures contained in 40 CFR 63, Subpart DDDDD, shall be utilized. This limit does not apply during periods of startup or shutdown, as defined in 40 CFR 63.7575. During these periods, the permittee shall follow the work practices in Specific Conditions **C.21.b.** and. **C.21.c.**
h. Parts per million by volume, dry, corrected to 7% O_2.

[Rules 62-204.800 & 62-212.400(BACT), F.A.C.; 40 CFR part 60 Subpart Db & part 63 Subpart DDDDD; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.11. ESP Secondary Power Operating Limit. The ESP secondary power operating limit shall be established during each performance test for filterable PM conducted in accordance with requirements established under Table 5 to 40 CFR 63, Subpart DDDDD. The permittee shall collect secondary voltage and secondary amperage for each ESP cell and calculate total secondary electric power input every 15 minutes during the entire period of the performance tests. The average total secondary electric power input shall be determined by computing the hourly averages using all of the 15-minute readings taken during each performance test. The unit-specific ESP total secondary electric power operating limit shall equal the lowest hourly average total secondary electric power measured according to Table 7 of 40 CFR 63, Subpart DDDDD, during the most recent performance test demonstrating compliance with the applicable emission limit. [Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.7530(b)(4)(iv), 40 CFR 63.7575, & Tables 4, 5, and 7 to 40 CFR 63, Subpart DDDDD.]

{Permitting note: The requirements for ESP secondary power monitoring from 40 CFR 63, Subpart DDDDD, apply to a unit with a wet scrubber and an ESP. For the purposes of this subpart, the wet sand separator can be considered a wet scrubber.}

Excess Emissions

*{Permitting Note: The following conditions apply only to the Primary NO_X BACT emissions standards in Specific Condition **C.10** of this subsection. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS or NESHAP programs.}*

C.12. Definitions.

a. *Startup* is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.

b. *Shutdown* is the cessation of the operation of an emissions unit for any purpose.

c. *Malfunction* is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200(165, 242, and 258), F.A.C.]

C.13. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

C.14. Demonstration of Compliance with Primary NO_X BACT. The Primary NO_X BACT limits apply at all times, except during the following operating conditions:

a. *Cold Startup:* During a cold startup of the boiler, the Primary NO_X BACT emission limits do not apply to the boiler, for no more than 12 hours during any 24-hour period. A cold startup of the boiler is defined as startup following a shutdown of the boiler lasting at least 24 hours. *{Permitting note: Cold startups are expected to be relatively uncommon events, occurring approximately once per year. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}*

b. *Hot Startup:* During a hot startup of the boiler, the Primary NO_X BACT emission limits do not apply, for no more than 8 hours during any 24-hour period. A hot startup of the boiler is defined as startup following a shutdown of the boiler lasting less than 24 hours.

c. *Boiler Shutdown:* During the process of boiler shutdown, the Primary NO_X BACT limits do not apply to the boiler, for no more than 2 hours during any 24-hour period.

d. *SNCR Adjustment:* During an adjustment of the SNCR system, which requires a brief period of uncontrolled NO_X emissions, the Primary NO_X BACT emission limits do not apply, for no more than 2

hours per calendar month. *{Permitting note: Based on the final design specifications, uncontrolled NO_X emissions are expected to be 0.26 lb/MMBtu. Uncontrolled NO_X data collected during these periods will be used to adjust the SNCR system as necessary.}*

e. *Documented Malfunction:* The Primary NO_X BACT emission limits do not apply during a documented malfunction, for no more than 2 hours in any 24-hour period. To qualify as a "documented malfunction," the malfunction must be documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail. The permittee shall report to the Department the nature, extent, and duration of the malfunction, and the actions taken to correct the problem.

Emissions during the startup, shutdown, and documented malfunction events listed above are not subject to the Primary BACT standards for NO_X. These are considered separate events, and each event may occur independently within any 24-hour period ("any 24-hour period" means a calendar day, midnight to midnight). Data from the NO_X CEMS collected during the events described above will not be used to demonstrate compliance with the Primary BACT emission limits for NO_X.

Data from the NO_X CEMS collected during the operating conditions described above, during which the Primary NO_X limits do not apply, will be used to demonstrate compliance with the Secondary NO_X BACT emission limits at all times, as described in Specific Conditions **C.10.** and **C.15**. All valid emissions data (including data collected during startups, shutdowns, and malfunctions) shall be used to report emissions for the Annual Operating Report.
[Rules 62-210.200(BACT), 62-210.370 & 62-210.700, F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.15. Secondary NO_X BACT Emission Limit. During the operating conditions listed in Specific Condition **C.14**, the permittee shall comply with the Secondary NO_X BACT limit specified in Specific Condition **C.10**. Demonstrating compliance with the NO_X limit in NSPS Subpart Db at all times shall be sufficient for demonstrating compliance with the Secondary NO_X BACT limit. [Rules 62-204.800(8)(b) & 62-210.200(BACT), F.A.C., and 40 CFR 60, Subpart Db.]

Monitoring of Operations

C.16. CEMS. Subject to the following, the permittee shall calibrate, operate, and maintain a CEMS to measure and record the emissions of NO_X, CO, and diluent gas (O_2 or CO_2) from the boiler in terms of the applicable standards.

a. *NO_X Monitor*. The NO_X monitor shall meet the requirements of Performance Specification 2 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. NO_X shall be expressed "as NO_2." Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60.

b. *CO Monitor*. The CO monitor shall meet the requirements of Performance Specification 4, 4A, or 4B in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. The CO monitor shall meet the requirements of 40 CFR 63.7525(a).

c. *Diluent Monitor*. The oxygen (O_2) or carbon dioxide (CO_2) content of the flue gas shall be monitored at the location where NO_X is monitored. If an O_2 monitor is not installed, the O_2 content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. If a CO_2 monitor is not installed, the CO_2 content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. The measured or calculated CO_2 concentration shall be used for demonstrating compliance with the GHG emission limit.

d. *1-Hour Averages.* Each 1-hour block average shall begin at the top of an hour. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the 1-hour average is not valid. Except for data authorized to be excluded, the permittee shall use all valid measurements or data points collected during an hour to calculate the 1-hour averages. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour.

e. *30-Day Averages.* 30-day averages shall be determined as follows:

(1) *NO_X.* The 30-operating-day rolling average shall be determined by averaging all 1-hour averages for 30 successive boiler operating days. A boiler operating day begins and ends at midnight of each day and includes any day that fuel is combusted.

(2) *CO.* The 30-operating-day rolling average means the arithmetic mean of the previous 720 hours of valid CO CEMS data.

f. *Daily Block Averages*. A daily block average is defined as the average from midnight to midnight, each day. The total mass emissions from the day shall be summed together and divided by the operating hours for the day to determine the daily block emission rate.

[Rules 62-4.070(3) & 62-210.200(BACT), F.A.C.; 40 CFR 63.7525(a) & 63.7575; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.17. Moisture Correction. If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). [Rules 62-4.070(3) & 62-210.200(BACT), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.18. NSPS Subpart Db Opacity Monitoring. The permittee shall comply with the opacity monitoring requirements of 40 CFR 60, Subpart Db. Options for compliance include a continuous opacity monitoring system (COMS), a continuous emissions monitoring system for particulate matter (PM CEMS), or an ESP predictive model. Stack tests for visible emissions are required, at the frequency given in Specific Condition **C.27.c.**, if a COMS is not used. The chosen method of compliance shall be identified in the application for a Title V air operation permit for this unit. [Rule 62-204.800(8)(b), F.A.C.; and, 40 CFR 60.48b(a) & 60.48b(j).]

C.19. Required Process and Fuel Monitoring.

a. *SNCR Urea Injection:* In accordance with the manufacturer's specifications, the permittee shall calibrate, operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition. [Rule 62-212.400(PSD), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

b. *Wet Sand Separators*. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain the following equipment: flow meter to monitor the water flow rate (gph) for each wet sand separator and a manometer (or equivalent) to monitor the pressure drop (inches of water) across each separator. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

c. *ESP Power*. The permittee shall install, calibrate, operate, and maintain a system to measure and record secondary power (voltage and amperage) to the ESP. The permittee shall conduct a performance evaluation of the power monitoring system in accordance with the monitoring plan required under

Specific Condition **C.20** at the time of each PM performance test, but no less frequently than annually. [Rule 62-212.400 (PSD), F.A.C.; 40 CFR 63.7525(h); and, Permit No. 0510003-061-AC (PSD-FL-435).]

d. *Steam and Feedwater Parameters*. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain continuous monitoring and recording devices for the following parameters: steam temperature (° F), steam pressure (psig), and steam production rate (lb/hour). In addition, the permittee shall monitor and record the flow rate, temperature, and pressure of feedwater. Records shall be maintained on site and made available upon request. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435).]

e. *Fuel Firing Rate*. The permittee shall monitor and record firing rate of each fuel on an hourly basis. The natural gas firing rate shall be determined by measuring natural gas usage (standard cubic feet per hour). The bagasse and wood firing (tons per hour) rate may be determined by weighing fuel to be fired, or calculated based on the steam parameters and the heating value of the fuel. [Rule 62-212.400 (PSD), F.A.C. and Permit No. 0510003-061-AC (PSD-FL-435.)]

f. *Fuel Monitoring.*

(1) *Bagasse*. A representative sample of bagasse shall be taken during each calendar quarter bagasse is fired and analyzed for the following: heating value (Btu/lb, as fired and dry); moisture content (percent by weight); sulfur content (percent by weight, as fired and dry); and ash content (percent by weight, as fired and dry). If no bagasse was fired during a quarter, the report shall indicate that no bagasse was fired as boiler fuel during the given quarter. Records of the results of these analyses shall be maintained on site and made available upon request. For the Annual Operating Report, the permittee shall calculate and record the annual bagasse firing rate. [Rules 62-210.200(PTE), 62-212.400(PSD) & 62-213.440(1)(b)1.b, F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

(2) *Wood Chips*. A representative sample of wood chips shall be taken during each calendar quarter wood chips are fired and analyzed for the following: heating value (Btu/lb, as fired and dry); moisture content (percent by weight); sulfur content (percent by weight, as fired and dry); and ash content (percent by weight, as fired and dry). Records of the results of these analyses shall be maintained on site and made available upon request. If no wood chips were fired during a quarter, the report shall indicate that no wood chips were fired as boiler fuel during the given quarter. Analytical results shall be determined and available for review within 30 days of the end of each calendar quarter. For each delivery of wood chips to the storage area, the permittee shall log the amount of wood chips delivered. For the Annual Operating Report, the permittee shall calculate the annual wood chips firing rate based on the difference between the total wood chips delivered and the amount of wood chips remaining. The total annual heat input rate from firing wood chips shall be calculated based on the annual firing rate and the measured heating values as determined from the sampling and analyses conducted throughout the year. [Rules 62-210.200(PTE), 62-212.400(PSD) & 62-213.440(1)(b)1.b, F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.20. CAM Plan, ESP. The permittee shall comply with the following CAM plan.

CAM Criteria	ESP Predictive Model
I. Indicator	Total ESP Power (in kilowatts)
Measurement Approach	Secondary voltage and secondary milliamps for each transformer – rectifier (TR) set will be measured. The total secondary electric power input for the ESP will be calculated using the following formula: $$P_t = \sum_{i=1}^{x} V_i I_i$$ Where: P_t = Total ESP Power (Watts) (Summation of all associated

CAM Criteria	ESP Predictive Model
	V_i = TR Secondary Voltage (kV), for TR Set i I_i = TR Secondary Current (ma), for TR Set i
II. **Indicator Range**	The ESP is subject to a minimum total secondary electric power input while EU044 is operating. The minimum total secondary electric power input is the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured during the most recent performance test demonstrating compliance with the applicable emission limits. The initial performance test yielded a minimum total secondary electric power input of **239.7 kW**.
III. **Performance Criteria** A. Data Representativeness	The minimum total secondary electric power input necessary to control filterable PM emissions to below the applicable emissions limits is evaluated annually. If performance tests for filterable PM for at least two consecutive years show that filterable PM emissions are at or below 75% of the Subpart Db filterable PM limit (0.030 lb/MMBtu), and if there are no changes in the operation of EU044 or air pollution control equipment that could increase emissions, U.S. Sugar may then choose to conduct performance tests for filterable PM every third year. If a performance test for filterable PM shows that emissions exceeded 75% of the Subpart Db emission limit, then the permittee shall conduct annual performance tests for filterable PM until all performance tests over a consecutive two-year period are at or below 75% of the emission limit.
B. Verification of Operational Status	PM testing results will be used to determine whether the total secondary electric power input observed during the compliance test was sufficient to control PM emissions to below the applicable PM emission limit. The total secondary electric power input will be continuously monitored and determined not to exceed the lowest hourly average total secondary electric power input observed during the most recent compliance testing which showed EU044 to be in compliance with all applicable PM emissions limits. The secondary electric power input limit is determined using secondary electric power input data. Secondary voltage and secondary amperage for each ESP cell must be collected and used to calculate total secondary electric power input data every 15 minutes during the entire period of the performance tests. Determine the average total secondary electric power input by computing the hourly averages using all of the 15-minute readings taken during each performance test.
C. QA/QC Procedures	Compliance demonstration with the PM emissions limit (0.030 lb/MMBtu) will be evaluated at the same frequency of PM emissions testing described above. The voltmeters and ammeters will be calibrated at least annually.
D. Monitoring Frequency	The secondary voltage and secondary current will be monitored continuously. At least one data point for each parameter will be collected in each quadrant of an hour. A minimum of four valid data points (one in each quadrant) is necessary to calculate a valid hourly average.
E. Data Collection Procedures	The control system will be calculated to record secondary voltage and secondary amperage for each TR and calculate the total secondary power input. Hourly averages will be calculated using the arithmetic average of at least four values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when calibration, quality assurance, or maintenance activities are being performed. A 30-day rolling average will be calculated using the calculated hourly averages. Records of all voltage and amperage measurements; all calculated total secondary power inputs; all hourly averages; and all 30 day rolling average will be stored for a period of 5 years.

CAM Criteria	ESP Predictive Model
F. Averaging Period	Continuous compliance will be demonstrated with the ESP secondary power operating limit by maintaining 30-day rolling average ESP secondary electric power at or above the minimum secondary electric power input. A 30-day rolling average means either the arithmetic mean of all valid hours of data from 30 successive operating days or the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes hours during startup and shutdown, data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, and periods when this unit is not operating. This follows the prescribed procedure under 40 CFR 63 Subpart DDDDD, for consistency with other, recent federal rules, and not that of 40 CFR 60.13.

In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the ESP and corrective actions taken in the Daily Operational Records required by this permit.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.48b(j)(6), 60.48Da(o)(3)(ii), 63.7505(d) 63.7521(b) & 64.]

C.21. NESHAP Subpart DDDDD Work Practice Requirements. The permittee shall follow all applicable work practice standards in 40 CFR 63, Subpart DDDDD. These include the following:

a. *Annual Tune-up.* The permittee shall conduct an annual tune-up of the boiler, in accordance with 40 CFR 63.7540(a)(10). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7540(a)(10).]

b. *Startup*.

(1) The permittee shall operate all continuous monitoring systems during startup. [Rule 62-204.800(11)(b), F.A.C.; and, Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.a.]

(2) The permittee shall use one or a combination of clean fuels during startup. Of the authorized fuels in Specific Condition **C.3.**, natural gas and clean wood qualify as clean fuels for startup. [Rule 62-204.800(11)(b), F.A.C.; and, Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.b.]

(3) The permittee shall engage all pollution control devices in accordance with Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c. [Rule 62-204.800(11)(b), F.A.C.; and, Table 3 to 40 CFR 63, Subpart DDDDD, Item 5.c.]

c. *Shutdown.*

(1) The permittee shall operate all continuous monitoring systems during shutdown. [Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

(2) The permittee may disengage pollution control devices only in a manner consistent with Table 3 to 40 CFR 63, Subpart DDDDD, Item 6. [Rule 62-204.800(11)(b), F.A.C.; and, Table 3 to 40 CFR 63, Subpart DDDDD, Item 6.]

d. *SSP*. Develop and implement a written startup and shutdown plan (SSP). The SSP must be maintained onsite and made available for inspection when requested by the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7555.]

Test Methods and Procedures

C.22. 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
5	Method for Determining Particulate Matter Emissions

Method	Description of Method and Comments
6C	Method for Determining SO_2 Emissions (Instrumental)
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 {Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
26 or 26A	Hydrogen Chloride, Halides, Halogens, OR Hydrogen Halide & Halogen-Isokinetic
29	Metals Emissions from Stationary Sources
30A, 3B, 101A, or ASTM-D6784	Mercury Emissions from Stationary Sources
CTM-027 or 320	Procedure for Collection and Analysis of Ammonia in Stationary Source. {Notes: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}, OR Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy
201A	Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources. {Note: If the gas filtration temperature exceeds 30 °C (85 °F), Method 201A measures only filterable particulate matter.}
202	Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 & 62-212.400(BACT), F.A.C.; Appendix A of 40 CFR 60; and, Permit No. 0510003-061-AC (PSD-FL-435).]

{Permitting Note: Bagasse contains low levels of mercury and requires an analytical method with low detection limit to obtain accurate results. Methods 1631 and 7473 have lower detection limits and are explicitly identified in EPA's response to public comments on Subpart DDDDD as those EPA would consider "equivalent", in accordance with the definition in 40 CFR 63.7575.}

C.23. Fuel Analysis Option for Hg and HCl. In lieu of stack tests for Hg or HCl, the permittee may perform monthly fuel analysis, in accordance with 40 CFR 63, Subpart DDDDD. [40 CFR 63.7505(c).]

*{Permitting Note: USSC complies with the Hg standard (seen in Specific Condition **C.10.**) through stack testing, in accordance with Specific Condition **C.23.a.** If USSC were to comply with the Hg standard through fuel analyses and each of 12 consecutive monthly fuel analyses demonstrates 75% or less of the Hg compliance level, the permittee may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75% of the Hg compliance level or the permittee begins burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75% of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.}*

C.24. 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.]

C.25. Continuous Compliance.

a. *Emission Limits:* Continuous compliance with the permit standards for emissions of NO_X, GHGs, and CO shall be demonstrated with data collected from the required CEMS. [Rules 62-4.070 and 62-210.200(BACT), F.A.C.; 40 CFR 60.48b(a) & (b); 40 CFR 63.7525(a); and, Permit No. 0510003-061-AC (PSD-FL-435).]

b. *ESP Secondary Power Operating Limit:* Continuous compliance with the ESP secondary power operating limit established under Specific Condition **C.11.** shall be demonstrated with data collected from the required ESP secondary power monitoring system. The owner or operator shall demonstrate continuous compliance with the ESP secondary power operating limit by maintaining 30-day rolling average ESP secondary electric power at or above the operating limit. [Rule 62-204.800(11)(b), F.A.C. and Table 8 to 40 CFR 63, Subpart DDDDD.]

C.26. $PM_{2.5}$ Test Methods. The emission limit for $PM_{2.5}$ in Specific Condition **C.10.** is for the sum of filterable $PM_{2.5}$ and condensable PM. For the initial test, filterable $PM_{2.5}$ shall be measured using Method 201A (or other methods as approved by the Department). If the initial tests indicate that the emissions rate of filterable PM, by Method 5, is greater than or equal to the emissions rate for filterable $PM_{2.5}$, by Method 201A, then subsequent compliance tests may use Method 5 for the filterable $PM_{2.5}$ measurement. If Method 5 is used, all measured filterable PM shall be assumed to be filterable $PM_{2.5}$. Condensable PM shall be measured using Method 202 (or other methods as approved by the Department). [Rules 62-4.070(3), 62-212.400(PSD), & 62-297.310(8)(b)1, F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.27. Subsequent Compliance Tests.

a. *Annual Tests:* During each calendar year (January 1st to December 31st), the emissions unit shall be tested to demonstrate compliance with the emissions standards for SO_2, $PM_{2.5}$ (filterable and condensable), Hg, HCl, and NH_3. Tests shall be conducted at a load greater than 90% of the maximum 24-hour continuous heat input rate when firing only bagasse or bagasse with wood chips. Data from the NO_X CEMS shall be reported for each run of the required tests for ammonia slip. The Department may require the permittee to repeat some or all of these stack tests after major replacement or major repair of any air pollution control or process equipment. If the permittee chooses to demonstrate compliance with the Hg or HCl limit through the fuel analysis option in NESHAP Subpart DDDDD, an annual stack test for that pollutant is not required. [Rule 62-297.310(8)(a), F.A.C.; 40 CFR 63.7505(c); and, Permit No. 0510003-061-AC (PSD-FL-435).]

{Permitting Note: If multiple tests show that total $PM_{2.5}$ (filterable + condensable) are well below the $PM_{2.5}$ emissions limit, the permittee may apply to the Department for a relaxation in $PM_{2.5}$ testing frequency, from annual to once per Title V permit cycle.}

b. *Frequency of Filterable PM Testing:* Initially, performance tests for filterable PM must be conducted during each calendar year. If performance tests for filterable PM for at least two consecutive years show that filterable PM emissions are at or below 75% of the Subpart DDDDD filterable PM limit, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, the permittee may then choose to conduct performance tests for filterable PM every third year. This test must be performed no more than 37 months after the previous filterable PM performance test. If a performance test for filterable PM shows that emissions exceeded 75% of the Subpart DDDDD emission limit, then the permittee shall conduct annual performance tests for filterable PM until all performance tests over a consecutive two-year period are at or below 75% of the emission limit. [Rule 62-297.310(8)(a)5.a., F.A.C.; 40 CFR 60.46b(d) and 63.7515(b) and (c).]

{Permitting Note: The Subpart DDDDD filterable PM limit is 0.026 lb/MMBtu, and 75% of this limit is 0.0195 lb/MMBtu.}

c. *Duration and Frequency of VE Testing.* Method 9 VE tests are required if the permittee elects not to use a continuous opacity monitoring system (COMS). The observation period for the Method 9 VE test may

be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation of the test. A VE test while firing bagasse shall be conducted each calendar year. For compliance with Subpart Db, more frequent testing may be required. The frequency of VE testing under Subpart Db is determined by the performance test results of the most recent VE test, as follows:

(1) If no visible emissions are observed, the VE test must be completed within 12 calendar months from the date that the most recent VE test was conducted, or within 45 days of the next day that wood is combusted, whichever is later.

(2) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent VE test must be completed within 6 calendar months from the date that the most recent VE test was conducted, or within 45 days of the next day that wood is combusted, whichever is later.

(3) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent VE test must be completed within 3 calendar months from the date that the most recent VE test was conducted, or within 45 days of the next day that wood is combusted, whichever is later.

(4) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent VE test must be completed within 45 days from the date that the most recent VE test was conducted.

[40 CFR 60.48b(a) and 60.48b(a)(1); Rule 62-297.310(8)(a)3., F.A.C.]

d. *Tests Upon Title V Renewal.* Prior to each renewal of the facility's air operation permit, the permittee shall determine the thermal efficiency of the boiler when firing only bagasse using the ASME short-form or equivalent procedure before conducting any required annual compliance tests in the year before renewal of the Title V air operation permit. The results of thermal efficiency test shall be provided with the application to renew the Title V air operation permit. [Rules 62-212.400(PSD), 62-297.310(8)(b)1. & 62-297.310(8)(a)5.a., F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

*{Permitting Note: USSC complies with the HCl standard (seen in Specific Condition **C.10.**) through periodic stack testing, as allowed in 40 CFR 63.7515(b), which permits a reduced frequency option of every 3 years if results are <75% of the standard for 2-consecutive years. If a stack test shows emissions exceeded the HCl limit or 75 percent of the emissions limit for HCl, the permittee shall conduct annual performance tests for HCl until all performance tests over a consecutive 2-year period meet the required level, pursuant to 40 CFR 63.7515(c).}*

C.28. Process Parameter Monitoring During Stack Tests. For each test run of a required stack test, the permittee shall calculate and record the following: the heat input rate based on the thermal efficiency and the steam and feedwater parameters; and the total power input to the electrostatic precipitator based on the monitored amperage and voltage. The actual heat input rate shall be determined using two methods: (a) steam parameters with enthalpies and the measured thermal efficiency, and (b) steam parameters with enthalpies and the boiler thermal efficiency. [Rules 62-212.400(PSD) & 62-297.310(6), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

Recordkeeping and Reporting Requirements

C.29. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Monthly Operations Summary	As requested by the Department	**C.31.**
Malfunction Notification Report (*if requested*)	Every 3-Months (Quarterly)	**C.32.a.**

Report	Reporting Deadline	Related Condition(s)
SIP Excess Emissions Report		**C.32.b.**
NSPS Excess Emission Report	Every 6-Months (Semiannually)	**C.34.**
NESHAP Excess Emission Report		**C.35.**

[Rule 62-213.440(1)(b), F.A.C.]

C.30. Test Reports. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-Wide Testing Requirements) of this permit. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(9)(c), F.A.C. and in Appendix TR of this permit. For each test run, the report shall also indicate the following information: steam production rate (lb/hour), heat input rate (MMBtu/hour), calculated bagasse firing rate (tons/hour), wood chip firing rate (tons/hour), and emission rates (lb/MMBtu and ppmvd if standard is in this form). Data from the NO_X CEMS shall be reported for each run of the required tests for ammonia slip. [Rule 62-297.310(10), F.A.C.]

C.31. Monthly Operations Summary. By the tenth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month of operation: hours of operation, bagasse and wood consumption, natural gas consumption, pounds of steam per month, and the updated 12-month rolling totals for each of these operating parameters. The Monthly Operations Summary shall be maintained on site and made available for inspection when requested by the Department. [Rules 62-4.070(3) & 62-212.400(PSD), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

*{Permitting Note: The data required in Specific Condition **C.31.** (Monthly Operations Summary) shall be accessible within the 10-calendar days. However, summary reports for aiding in compliance review can be completed during the semiannual reports.}*

C.32. Excess Emissions Reporting.

a. *Malfunction Notification*. If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of the following: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

b. *Quarterly Report – CO, NOx, and GHG Emissions*. Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing CO, NO_X, and GHG emissions including periods of startups, shutdowns, and malfunctions, periods of exclusion from Primary NO_X BACT compliance demonstrations, and CEMS systems monitor availability for the previous quarter. The report shall also include the 12-month average GHG emissions rates for all compliance periods that end during the reporting period. If CEMS data are excluded from a compliance determination during the quarter due to a malfunction, the permittee shall include a description of the malfunction, the actual emissions recorded, and the actions taken to correct the malfunction. [Rules 62-4.070(3), 62-4.130, & 62-212.400 (PSD), F.A.C.; and, Permit No. 0510003-061-AC (PSD-FL-435).]

C.33. 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

C.34. NSPS Provisions. Boiler 9 is subject to the New Source Performance Standards of Subparts A (General Provisions) and Db (Industrial-Commercial-Institutional Steam Generating Units) in 40 CFR 60. The

permittee shall comply with all applicable requirements of NSPS Subpart Db. [Rule 62-204.800(8)(b), F.A.C.; and, 40 CFR 60, Subpart A & Subpart Db.]

C.35. NESHAP Provisions. Boiler 9 is subject to 40 CFR 63, Subparts A (General Provisions) and DDDDD, (Industrial, Commercial, and Institutional Boilers and Process Heaters). The permittee shall comply with all applicable requirements of NESHAP Subpart DDDDD. [Rule 62-204.800(11)(b), F.A.C.; and., 40 CFR 63 Subparts A and DDDDD.]

*{Permitting Note: Please see Facility-Wide Condition **FW9** (Semi-Annual Reports) of the Title V permit for an alternate report submittal deadline.}*

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Subsection D. Emissions Unit 027

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

EU No.	Brief Description
027	Biomass Handling and Storage

Bagasse, the cellulosic byproduct of sugar production, is transported throughout the Clewiston Mill over a series of conveyors. The conveyors bring the bagasse from sugar processing to the large biomass boilers (EU 014, EU 028, and EU 044) for combustion, or to an outdoor storage pile for temporary storage. Drop points between conveyors and the storage area result in emissions of fugitive dust. Additional emissions results from truck traffic and pile maintenance in the storage area.

Bagasse produced at the Clewiston Mill is stored in two storage piles. One of the piles is located in the northwest corner of the Clewiston mill while the other is located southeast of the sugar warehouses and refinery packaging facility.

{Permitting Note: Biomass handling and storage emissions are regulated under Rule 62-212.400(BACT), F.A.C. and Air Construction Permit No. 0510003-037-AC (PSD-FL-333C). Biomass means bagasse and/or wood chips.}

Work Practice Standards

D.1. Biomass Handling and Storage Equipment. To minimize fugitive particulate matter, conveyors shall be covered, and landing zones shall be provided for conveyor transfer points. The conveyor system shall be completely covered or enclosed except for the transfer points to/from the material stockpile and the point associated with conveying material from conveyor C9A to C9B in the drying mill. The existing bagacillo system pneumatically collects a small fraction of bagasse from the conveyor system and transfers fine particles suspended in the gas stream to the Boiling House. The bagacillo cyclone separates particles from the gas stream, which are used as part of the cake material on the vacuum filters. The bagacillo system is an existing, unregulated emissions unit. [Rule 62-212.400 (BACT), F.A.C. and Permit No. 0510003-037-AC (PSD-FL-333C).]

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Subsection E. Emissions Unit 017

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

EU No.	Brief Description
017	Granular Carbon Regeneration Furnace

The granular carbon regenerative furnace (GCRF) is used to remove colorants and VOC emissions during the decolorization process in the sugar refinery. The design carbon throughput is up to 60,000 pounds per day. The furnace drives off colorants and VOC emissions from the carbon and regenerates the carbon for reuse. A direct flame afterburner controls VOC emissions and a wet venturi/tray scrubber system controls particulate matter emissions. The plant identifies this point source as S-12.

Design Information: The afterburner is a Zero Hearth Type (10'-9" OD x 8 HTH) furnace manufactured by BSP Thermal Systems, Inc. which is designed with the following specifications: 1200 °F to 1400 °F design temperature; 10,600 to 16,300 acfm flow rate; 0.5 to 0.75 seconds exhaust gas residence time; and a 92% destruction efficiency. The furnace and afterburner will fire approximately 15,763 cubic feet per hour and a maximum of 138.08 million cubic feet per year.

Design Information: The wet scrubber system is a high energy venturi wet scrubber with tray type wet scrubber which is designed with the following specifications: 160 °F and 4300 acfm outlet gas flow; 12 to 30 inches of water across venturi scrubber with a 36 gallons per minute (gpm) flow rate; 3 to 8 inches of water across the tray scrubber with 230 gpm flow rate; and a 97% particulate removal efficiency.

{Permitting Note: Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to BACT determinations for CO, NO_X, PM/PM_{10}, SAM, SO_2 and VOC. This emissions unit is not a process heater subject to 40 CFR 63, Subpart DDDDD because combustion gases come into direct contact with the granular carbon, as defined in 40 CFR 63.7575.}

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity.

a. *GCRF Afterburner.* The permittee shall operate and maintain an afterburner designed to destroy at least 92% of the VOC emissions during regeneration of the carbon bed as part of the decolorization process. The afterburner shall be designed with a control temperature of between 1200 °F and 1400 °F and an exhaust gas residence time of between 0.5 and 0.75 seconds. Excluding initial startup, shutdown, and malfunction, the afterburner temperature shall be maintained at 1200 °F or higher except for up to 6 total minutes each hour during which the temperature shall not fall below 1000 °F.

b. *GCRF Wet Scrubber.* The permittee shall operate and maintain a wet venturi/ tray scrubber system designed to control at least 97% of the maximum particulate emissions during regeneration of the carbon bed as part of the decolorization process. The venturi scrubber shall be designed for a pressure drop of between 12 to 30 inches of water column. The wet tray scrubber shall be designed for a pressure drop of between 3 to 8 inches of water column. Separate manometers (or equivalent devices) shall be installed, operated, and maintained to indicate the pressure drop across each control device. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment.

[Rules 62-4.160(2), 62-210.200(PTE) & 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

E.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

E.3. Authorized Fuel: Only natural gas shall be fired in the granular carbon regenerative furnace and associated afterburner. [Rules 62-210.200(PTE) & 62-212.400(BACT), F.A.C.; and, Permit No. 0510003-054-AC (PSD-FL-272B).]

E.4. Hours of Operation: The hours of operation for this unit are not limited (8760 hours per year). [Rules 62-210.200(PTE) & 62-212.400(BACT), F.A.C.; and, Permit No. 0510003-054-AC (PSD-FL-272B).]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **E.5. - E.7.** are based on the specified averaging time of the applicable test method.

E.5. PM Standard. As determined by EPA Method 5, PM emissions shall not exceed 0.7 pounds per hour from the granular carbon regenerative furnace. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

E.6. Opacity Standard. As determined by EPA Method 9, visible emissions shall not exceed 10% opacity excluding water vapor. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

E.7. VOC Standard. As determined by EPA Method 25A, VOC emissions shall not exceed 1.0 pound per hour (reported as propane) from the granular carbon regenerative furnace. Optionally, EPA Method 18 may be conducted concurrently to deduct methane. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

Monitoring of Operations

E.8. Plan, Wet Scrubbers. The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1 (Venturi Scrubber)	Indicator #2 (Wet Tray Scrubber)
Indicator	Pressure drop across venturi scrubber	Pressure drop across wet tray scrubber
Measurement Approach	Manometer (or equivalent)	Manometer (or equivalent)
Indicator Range	An excursion is defined as any pressure drop **below 20 inches of water column**. Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any pressure drop **below 4.4 inches of water column**. Excursions trigger inspection, corrective action, record keeping and reporting.
Data Representativeness	Manometer measures scrubber pressure drop with a minimum accuracy of ± 0.5 inches of water column (gage).	Manometer measures scrubber pressure drop with a minimum accuracy of ± 0.5 inches of water column (gage).
Verification of Operational Status	NA	NA
QA/QC Procedures	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
Monitoring Frequency	Continuous readout	Continuous readout
Data Collection Procedures	*Once per 8-hour shift.*	*Once per 8-hour shift.*
Averaging Period	NA	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the wet scrubbers and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 & 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64.]

Test Methods and Procedures

E.9. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions from Stationary Sources
9	Visual Determination of the Opacity
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, 62-212.400(BACT) & 62-297.100, F.A.C.; Appendix A of 40 CFR 60; and, Permit No. 0510003-054-AC (PSD-FL-272B).]

E.10. 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.]

E.11. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the emissions unit shall be tested to demonstrate compliance with the emissions standards for VE. Compliance with the PM and VOC emissions standards shall be assumed as long as the emissions unit remains in compliance with the opacity standard, as well as the control equipment monitoring requirements for the afterburner and wet scrubbing system. [Rules 62-212.400(BACT) & 62-297.310(8), F.A.C.; and, Permit No. 0510003-054-AC (PSD-FL-272B).]

E.12. Compliance Tests Prior To Renewal. Compliance tests shall be performed for VE, PM and VOC once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **E.5. - E.7.** [Rules 62-210.300(2)(a), 62-212.400(BACT) & 62-297.310(8)(b), F.A.C.; and, Permit No. 0510003-054-AC (PSD-FL-272B).]

E.13. Tests After Substantial Modifications. All performance tests shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

E.14. Monitoring of Test Parameters. During any required test, the permittee shall monitor and record the afterburner temperature and wet scrubber pressure differentials at 15-minute intervals. [Rules 62-212.400(BACT) & 62-297.310(6), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

Recordkeeping and Reporting Requirements

E.15. Operations Log. At least once per 8-hour shift, the permittee shall observe and record the afterburner temperature and the wet scrubber pressure differentials. The permittee may install automated equipment to continuously record these parameters. For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for each month. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-054-AC (PSD-FL-272B).]

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

EU No.	Brief Description
015	VHP sugar dryer controlled by baghouse (S-11).
016	White sugar dryer No. 1 controlled by baghouse (S-10).
018	Vacuum systems with baghouses for: screening/distribution system (S-1); 100 lb bagging operation (S-2); and 5 lb bagging operation (S-3).
019	Conditioning silos consisting of three silos controlled by baghouses. (S-7, S-8, S-9).
020	Screening/distribution system consisting of powdered sugar/starch bins controlled by baghouses (S-5, S-6).
021	Alcohol Usage.
022	Sugar packaging line controlled by a baghouse. (S-4).
043	Baghouse – Bulk Loading Operation. (S-17).

This subsection regulates miscellaneous sugar refinery sources. The formation of sugar within this syrup begins under vacuum in vacuum pans (EU 018), which pull water from the juice to form a mixture of sugar crystals and syrup, known as massecuite. Crystallization is further facilitated by slowly cooling and stirring the massecuite before separating the crystals from the remaining syrup in a centrifuge. Isopropyl alcohol is added in the crystallization process, as needed (EU 021).

The unrefined sugar crystals are either sent directly to the refinery or directed by belt conveyors to the sugar warehouses, where it is dried by the steam heated VHP Sugar Dryer (EU 015) prior to temporary storage.

Following the mill, or upon return from the warehouses, sugar is decolorized with carbon. Spent carbon from the refinery is collected and regenerated in the Granular Carbon Regeneration Furnace (EU 017; referenced in Section **III.E.**), which is fueled by natural gas and controlled by an afterburner and wet venturi/tray scrubber. The decolorized sugar is then further dried by either the White Sugar Dryer No. 1with baghouse (EU 016) or White Sugar Dryer No. 2 with wet scrubber (EU 029; referenced in Section **III.G.**) and stored in conditioning silos (EU 019) for 24 hours in conditioned, dehumidified air. Conditioned sugar is passed through graded screens in the screening tower, separating the sugar by granule size. Sugar of varying granule sizes are stored in separate bins (EU 020), which can be loaded in bulk loadout railroad cars or trucks (EU 043) or routed to the packaging area (EU 022), where sugar is packed in bags for consumer and industrial users.

{Permitting Note: Pursuant to Rule 62-212.400, F.A.C., these emissions units are subject to BACT determinations for PM/PM_{10} and VOC.}

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity.

a. *Refined Sugar Limitation.* No more than 2000 tons of refined sugar per day and no more than 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2250 tons of refined sugar per day and no more than 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0510003-038-AC (PSD-FL-346A).]

b. *Alcohol Usage.* Alcohol usage from the sugar refinery shall not exceed 30,000 pounds per consecutive 12 months. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0510003-010-AC (PSD-FL-272A).]

c. *Sugar Packaging Lines (S-4); EU 022.* Sugar Packaging Lines (S-4) outlet gas flow rate at 16,500 (acfm). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-055-AC.]

d. *Bulk Loadout Operations (S-17); EU 045.* Bulk Loadout Operations (S-17) outlet gas flow at 10,600 (acfm). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-055-AC.]

F.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

F.3. Hours of Operation. There are no limits on the hours of operation (8,760 hours per year) for these emissions units. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit Nos. 0510003-010-AC (PSD-FL-272A) & 055-AC.]

Control Technology

F.4. Baghouses. The permittee shall operate and maintain high-efficiency baghouses designed to control at least 99.9% of the particulate matter emitted from each emissions unit and point. [Rule 62-212.400(PSD), F.A.C. and Permit No. 0510003-010-AC (PSD-FL-272A).]

Emission Limitations and Standards

F.5. PM Emissions. The following table identifies the PM limits for each baghouse:

EU No.	Point ID	dscfm	Equivalent Emissions	
			lb/hour	Ton/Year
015	S-11	110,042	1.63	7.14
016	S-10	94,488	1.44	6.30
018	S-1	990	0.06	0.28
	S-2	872	0.06	0.28
	S-3	984	0.06	0.28
019	S-7	2,641	0.06	0.25
	S-8	2,641	0.06	0.25
	S-9	2,641	0.06	0.25
020	S-5	2,668	0.06	0.25
	S-6	8,735	0.19	0.82
022	S-4	14,927	0.38	1.66
043	S-17	9,589	0.21	0.90
Totals			4.27	18.66

Compliance with the above PM standards is assumed, if compliance with the opacity standard is demonstrated. [Rule 62-212.400(PSD), F.A.C.; and, Permit Nos. 0510003-010-AC (PSD-FL-272A) & 055-AC.]

F.6. Opacity Standard. As a surrogate for particulate matter, visible emissions shall not exceed 5% opacity from any of these emissions units or points. [Rule 62-212.400(PSD), F.A.C.; and, Permit Nos. 0510003-010-AC (PSD-FL-272A) & 055-AC.]

Monitoring of Operations

F.7. CAM Plan, Baghouses (EU-018). The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1
Indicator	Opacity of each of baghouse vents (S-1, S-2 and S-3) on the vacuum systems (EU-018)
Measurement Approach	In accordance with EPA Method 22, observer conducts a 1-minute observation of each baghouse vent.

CAM Criteria	Indicator #1
Indicator Range	An excursion is defined as any observed visible emissions. Excursions trigger inspection, corrective action, record keeping and reporting.
Data Representativeness	Visible emissions are either present or not.
Verification of Operational Status	Verify operation of vacuum system before observations are made.
QA/QC Procedures	EPA Method 22 procedures are specified in Appendix A of 40 CFR 60.
Monitoring Frequency	One-minute observations made once per day for each baghouse vent.
Data Collection Procedures	Daily observations shall be recorded in a written or electronic log.
Averaging Period	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the baghouses and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 & 62-213.440(1)(b)1.a, F.A.C.; and, 40 CFR 64.]

Test Methods and Procedures

F.8. 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
5	Method for Determining Particulate Matter Emissions.
9	Visual Determination of the Opacity of Emissions from Stationary Sources

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. [Rules 62-204.800 & 62-212.400(PSD), F.A.C.; and, Permit Nos. 0510003-010-AC (PSD-FL-272A) & 055-AC.]

F.9. 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.]

F.10. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the permittee shall conduct visible emissions tests on each baghouse exhaust. Compliance with the PM standards shall be assumed as long as the emission unit remains in compliance with the opacity standard. [Rules 62-212.400(PSD) & 62-297.310(8), F.A.C.; and, Permit Nos. 0510003-010-AC (PSD-FL-272A) & 055-AC.]

F.11. Compliance Tests Prior To Renewal. Prior to renewal of the Title V permit, the permittee shall also conduct compliance tests for VE (opacity). Only VE tests are required to demonstrate compliance with the PM standard. [Rule 62-297.310(8), F.A.C. and Permit No. 0510003-055-AC.]

{Permitting Note: Annual VE tests are required in accordance with Specific Condition F.10. Accordingly, the prior-to-renewal testing in Specific Condition F.11. is satisfied by complying with Specific Condition F.10.}

Recordkeeping and Reporting Requirements

F.12. Monthly Records. Within ten days following each month, the permittee shall calculate the refined sugar packaging rate, the refined sugar load out rate and the alcohol usage rate. The permittee shall record each monthly rate and the 12-month rolling total in a written or electronic log. Calculation of the alcohol usage shall

be determined by the purchase records and the appropriate Material Data Safety Sheets. [Rule 62-212.400(PSD), F.A.C. and Permit No. 0510003-010-AC (PSD-FL-272A).]

*{Permitting Note: The data required in Specific Condition **F.12.** (Monthly Records) shall be accessible within the 10-calendar days. However, summary reports for aiding in compliance review can be completed during the semiannual reports.}*

F.13. 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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Subsection G. Emissions Unit 029

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

EU No.	Brief Description
029	White Sugar Dryer No. 2

White Sugar Dryer No. 2 is a fluidized bed-type dryer/cooler. After wet refined sugar is centrifuged, the dryer will be used to drive off remaining moisture. The refined sugar is then transferred to the conditioning silos. Particulate matter emissions from the dryer are controlled by a set of four (4) high-efficiency cyclone collectors in parallel, followed by a wet scrubber.

Design Information: White Sugar Dryer No. 2 has a rated design capacity of 85 tons per hour of refined sugar. Sugar with a moisture content of approximately 1.5% by weight enters the dryer between 120 °F - 140 °F and is suspended in a fluidized bed with jets of hot, conditioned air. A maximum of 11,000 pounds per hour of low-pressure steam (12 psig) from the existing mill boilers supply heat for the process; no fuel is fired. Sugar exits the dryer with a moisture content of approximately 0.03% by weight and a temperature between 92 °F to 102 °F. Flue gas exhaust at 90° F exits a stack approximately 82 feet above ground level with a with a volumetric flow rate of 90,000 acfm. The rectangular stack is 7.0 feet by 6.0 feet. The scrubber pressure drop and scrubber water recirculation flow rate are continuously monitored.

{Permitting Note: The particulate matter emissions standards for the new dryer are established pursuant to Rule 62-212.400, F.A.C (BACT).}

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The maximum design capacity of the sugar dryer is 85 tons per hour of sugar. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0510003-038-AC (PSD-FL-346A).]

G.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

G.3. Hours of Operation. This emissions unit may operate continuously (i.e., 8,760 hours/year) without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

G.4. Air Pollution Control Equipment.

a. *Cyclone Collectors*: In accordance with the manufacturer's recommendations, the permittee shall operate and maintain a set of four high-efficiency cyclone collectors in parallel (Entoleter, LLC Model 6600 or equivalent) with a design removal efficiency of at least 99% of the particulate loading from the new white sugar dryer based on the following inlet conditions: inlet temperature of 110° F; inlet flow rate of 105,000 ACFM; inlet dust loading of 14 grains per dscf of inlet gas (11,760 lb/hour); and a pressure drop across the cyclone collectors of 6 inches of water column. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain a manometer (or equivalent) to monitor the pressure differential across each cyclone collector. Although no periodic records of the pressure differential are required, the devices shall be properly maintained and functional to provide operational data for evaluating problems.

b. *Wet Scrubber*: In accordance with the manufacturer's recommendations, the permittee shall operate and maintain a wet scrubber (Entoleter, LLC Centrifield Vortex Model 1500 or equivalent) with a design removal efficiency of at least 96% of the particulate loading from the new cyclone collectors. The design control efficiency is based on the following inlet conditions: inlet temperature of 113° F; inlet flow rate of 105,000 ACFM; inlet dust loading of 0.14 grains per dscf of inlet gas (118 lb/hour); a scrubber water recirculation flow rate of 500 gpm; a scrubber make-up water flow rate of 12 gpm; and a pressure drop of 8 inches of water column. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain devices to continuously monitor and record the wet scrubber water recirculation rate (gpm) and the pressure differential across the wet scrubber (inches of water column).

The combined design removal efficiency of the two particulate control devices shall be no less than 99.96% based on the above conditions.

[Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-038-AC (PSD-FL-346A).]

Emission Limitations and Standards

G.5. PM Standard. As determined by EPA Method 201A stack test, particulate matter emissions less than 10 microns (PM_{10}) shall not exceed 0.005 grains per dscf and 4.2 pounds per hour based on the average of three test runs. As determined by EPA Method 5 stack test, particulate matter emissions shall not exceed 15.0 pounds per hour based on the average of three test runs. [Design; Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-346A.]

G.6. Opacity Standard. Visible emissions from the wet scrubber stack shall not exceed 10% opacity excluding water vapor. [Rule 62-212.400(PSD), F.A.C. and Permit No. PSD-FL-346A.]

Monitoring of Operations

G.7. CAM Plan, Wet Scrubber. The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1	Indicator #2
Indicator	Total scrubber water flow rate	Pressure drop across scrubber
Measurement Approach	Flow meter	Manometer (or equivalent)
Indicator Range	An excursion is defined as any flow rate **below 500 gallons per minute**. (3-hour block average). Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any pressure drop **below 8 inches of water column**. (3-hour block average). Excursions trigger inspection, corrective action, record keeping and reporting.
Data Representativeness	Flow meter measures scrubber flow rate with a minimum accuracy of ± 5% of total water flow.	Manometer measures scrubber pressure drop with a minimum accuracy of ± 0.5 inches of water column (gage).
Verification of Operational Status	NA	NA
QA/QC Procedures	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
Monitoring Frequency	Continuous readout	Continuous readout
Data Collection Procedures	Based on continuous monitoring data, calculate a 3-hour block average.	Based on continuous monitoring data, calculate a 3-hour block average.
Averaging Period	3-hour block average	3-hour block average

The scrubber system shall be operated so that fresh water makeup will be added to maintain a maximum sugar content of 15 brix in the recirculated scrubber water. In addition, the permittee shall comply with the general CAM provisions specified in Appendix CAM of this permit. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800, 62-212.400(PSD) & 62-213.440(1)(b)1.a, F.A.C.; 40 CFR 64; and Permit No. 0510003-038-AC (PSD-FL-346A).]

Test Methods and Procedures

G.8. 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
5	Method for Determining Particulate Matter Emissions.
9	Visual Determination of the Opacity of Emissions from Stationary Sources
201A	Determination of PM_{10} Emissions from Stationary Sources

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. [Rules 62-204.800 & 62-212.400(PSD), F.A.C.; and, Permit No. 0510003-038-AC (PSD-FL-346A).]

G.9. 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.]

G.10. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the permittee shall conduct compliance tests for opacity. [Rules 62-212.400(PSD) & 62-297.310(8), F.A.C.; and, Permit No. 0510003-038-AC (PSD-FL-346A).]

G.11. Compliance Tests Prior To Renewal. Prior to renewal of the Title V permit, the permittee shall also conduct compliance tests for PM emissions and opacity. [Rules 62-210.300(2)(a), 62-212.400(PSD) and 62-297.310(8)(b), F.A.C.; and Permit No. 0510003-038-AC (PSD-FL-346A).]

G.12. Monitoring of Test Parameters. During any required test, the permittee shall monitor and record the following information at the beginning and end of each test run: sugar processing rate through the dryer (tons per hour); the scrubber water recirculation rate (gpm); the scrubber water sugar content in brix; the pressure differential across the cyclone collector (inches of water column); and the pressure differential across the wet scrubber (inches of water column). [Rules 62-212.400(PSD) & 62-297.310(6), F.A.C. and Permit No. 0510003-038-AC (PSD-FL-346A).]

Reporting Requirements

G.13. 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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Subsection H. Emissions Unit 010, 030, 031 & 033

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

EU No.	Brief Description
010	Lime Silo with Baghouse at the Water Treatment Plant
030	Limestone Storage Silo with Baghouse at the Molasses Plant
031	Limestone Storage Silo and Truck/Rail Handling System at the Sugar Refinery
033	Salt Silo with Baghouse at the Molasses Plant

USSC stores lime for use in the water treatment plant at the Clewiston Mill. Lime is currently stored in the silo regulated under EU 010 and discharged into a hopper located on top of the water treatment plant and a second, identical to the hopper on top of the water treatment plant is utilized for redundancy. The lime storage silo can only discharge to one hopper at a time. Prior to Title V Air Operation Permit No. 0510003-032-AV, EU 010 was on the List of Unregulated Emissions Units.

The lime handling system regulated under EU 031, is used to treat the extracted juice from the mills with lime before the juice is boiled in the Boiling House.

Limestone and salt are received by truck and stored in silos (EU 030 and EU 033, respectively) for use with the by-product Molasses in the animal feed production process.

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity.

a. *Limestone Storage Silo at the Molasses Plant (EU 030)*. The process/operation rate shall not exceed 5,000 tons per year throughput. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-033-AC.]

b. *Limestone Storage Silo at the Sugar Refinery (EU 031)*. Each baghouse control system shall be maintained for a flow rate of approximately 500 acfm and an outlet grain loading of 0.02 grains per dscf. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-034-AC.]

c. *Salt Silo at the Molasses Plant (EU 033)*. The operating rate of the salt silo is approximately 33 tons per hour. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-025-AC.]

H.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

H.3. Method of Operation (EU 030). Limestone is delivered by truck and pneumatically (750 acfm) off-loaded into the storage silo at a rate of approximately 1,100 pounds per minute (33 tons per hour) with a maximum throughput rate of 5,000 tons per year (TPY). Limestone is unloaded from the silo via gravity drop into a mechanical auger where it will be conveyed to the Molasses Plant process. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-033-AC.]

H.4. Hours of Operation. This emissions unit may operate continuously (i.e., 8,760 hours/year) without restriction. [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0510003-025-AC, 033-AC & 034-AC.]

Control Technology

H.5. Equipment. To control PM emissions when loading and unloading, each silo shall be equipped with a baghouse. [Rules 62-210.200(PTE) and 62-213.440(2), F.A.C.]

H.6. Operation Procedures. Operation procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. Any time EU 033 is found to be performing inadequately because of overloading, neglect, or other reasons, the owner shall discontinue its use until

measures are provided to correct the cause of such performance. [Rule 62-4.070(3), F.A.C. and Permit No. 0510003-025-AC.]

Emission Limitations and Standards

H.7. PM/PM_{10} Standard. The maximum estimated PM/PM_{10} emissions from the Limestone Storage Silo at the Molasses Plant (EU 030) shall not exceed 0.55 TPY and 0.126 lb/hour. [Rule 62-4.070(3), F.A.C. and Permit No. 0510003-033-AC.]

H.8. VE Standard. Emissions from each baghouse vent shall not exceed 5% opacity. The permittee shall take reasonable precautions to minimize fugitive particulate matter emissions from other activities related to silo loading and unloading. Emissions from these other activities (without baghouse controls) related to silo loading and unloading operations shall not exceed 20% opacity. [Rules 62-296.320(4) and 62-297.620(4), F.A.C.]

Test Methods and Procedures

H.9. 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
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources

A visible emissions test shall be conducted while loading the silo at a rate that is representative of the normal silo-loading rate. Each test report shall state the actual silo-loading rate during emissions testing.

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 No. 0510003-025-AC.]

*{Permitting Note: Continuous compliance with Specific Condition **H.7.** (PM/PM_{10} Standard) is demonstrated by complying with Specific Condition **H.8.** (VE Standard).}*

H.10. 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.]

H.11. Compliance Tests. During each calendar year (January 1st to December 31st), the permittee shall conduct visible emissions tests in accordance with EPA Method 9 on each baghouse vent to demonstrate compliance with the opacity standard. The minimum observation period shall be at least 30 minutes or, if the operation is normally completed in less than 30 minutes and does not recur within that time, the test shall last for the length of the silo loading operation. Tests shall be conducted at a material transfer rate representative of the typical operation used throughout the year. For each test, the permittee shall record and report the material handling rate, pneumatic line pressure and pressure differential across the baghouse. For the lime storage and handling system (EU-031), annual tests shall be conducted while unloading lime from a railcar. Prior to renewing the air operation permit, a test shall also be conducted while unloading lime from a truck (EU-031). [Rules 62-210.300(2)(a) & 62-297.310(8), F.A.C.; and, Permit Nos. 0510003-031-AC & 034-AC.]

Reporting Requirements

H.12. 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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Subsection I. Emissions Unit 036

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

EU No.	Brief Description
036	Two Hydrogen Sulfide Degasification Systems

The water treatment plant uses the hydrogen disulfide degasification system (EU 036).

The hydrogen sulfide (H_2S) degasification system (EU 036) is used for the water treatment plant.

{Permitting Note: In accordance with Rule 62-212.400(PSD), F.A.C., the above emission unit is subject to a Best Available Control Technology (BACT) determination for hydrogen sulfide (H_2S) emissions.}

Essential Potential to Emit (PTE) Parameters

I.1. Degasification Systems. The permittee is authorized to operate two (2) H_2S degasification systems for the associated water wells. [Rules 62-210.200(PTE) & 62-212.400(BACT), F.A.C.; and, Permit No. 0510003-050-AC (PSD-FL-415A).]

I.2. Hours of Operation. The hours of operation are not limited (8,760 hours per year). [Rules 62-210.200(PTE) & 62-212.400(BACT), F.A.C.; Permit Nos. 0510003-050-AC (PSD-FL-415A).]

Emission Limitations and Standards

I.3. Hydrogen Sulfide. The emissions of H_2S from the combined degasification systems shall not exceed 18.0 tons per consecutive 12-month rolling total based on monthly raw well water flow rates and quarterly water sampling to determine the H_2S concentration in the raw water entering the degasification units. If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the permittee may be requested to revisit the determination of BACT for H_2S emissions from degasification systems. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-050-AC (PSD-FL-415A).]

I.4. 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" is defined as 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." [Rules 62-210.200(177), 62-212.400(BACT) & 62-296.320(2), F.A.C.; and, Permit No. 0510003-050-AC (PSD-FL-415A).]

Monitoring of Operations

I.5. Water Use. The permittee shall calibrate and operate flow meters (or equivalent devices) with integrators to monitor the water flow rate from each water well. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-050-AC (PSD-FL-415A).]

I.6. Water Wells Sampling/Analysis. On at least a quarterly basis, the permittee shall obtain representative samples of the water going to the degasification units. The samples shall be taken no earlier than 60 days apart. Each sample shall have an analysis conducted to determine the H_2S concentration. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-050-AC (PSD-FL-415A).]

Recordkeeping and Reporting Requirements

I.7. Monthly Records. Within ten calendar days following each month, the permittee shall observe and record the total monthly water pumped from the water wells to each degasification unit. This information shall be used in conjunction with the measured H_2S concentration for the given quarter to determine the H_2S emissions for the month and the previous 12 months, rolling total. [Rule 62-212.400(BACT), F.A.C. and Permit No. 0510003-050-AC (PSD-FL-415A).]

*{Permitting Note: The data required in Specific Condition **I.7.** (Monthly Records) shall be accessible within the 10-calendar days. However, summary reports for aiding in compliance review can be completed during the semiannual reports.}*

I.8. 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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Subsection J. Emissions Unit 045

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

EU No.	Brief Description
045	Warehouse Hot Water Heater

The hot water heater at the Clewiston Mill fires natural gas (a gas 1 fuel) and has a design heat input capacity of 2.8 MMBtu/hour.

{Permitting Note: This emissions unit is a gas 1 fuel hot water heater, regulated as a process heater under 40 CFR 63, Subpart DDDDD, adopted and incorporated by reference in Rule 62-204.800(11)(b), F.A.C. Pursuant to 40 CFR 63.7575, EU 045 does not meet the definition of a hot water heater which would be exempt from this NESHAP. EU 045 is not subject to any of the emissions limits in Table 1 of NESHAP Subpart DDDDD. However, the water heater is required to undergo regular tune-ups once every five years.}

Essential Potential to Emit (PTE) Parameters

J.1. Permitted Capacity. EU 045 is a 300-gallon hot water heater with a design heat input rate of 2.8 MMBtu/hour. [Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C.]

J.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

J.3. Authorized Fuel. The only authorized fuel for this water heater is natural gas. [Rule 62-210.200(PTE), F.A.C.]

J.4. Hours of Operation. This emissions unit may operate continuously (i.e., 8,760 hours/year) without restriction. [Rule 62-210.200(PTE), F.A.C.]

Work Practice Standards

J.5. Tune-Ups. The first 5-year tune-up must be no later than 61 months after the initial startup of the new hot water heater. To demonstrate continuous compliance, the owner or operator shall conduct a tune-up on the hot water heater every five years, according to the requirements specified in paragraphs a. through g., below. Each tune-up shall be conducted no more than 61 months after the previous tune-up.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject;
e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
f. Maintain on-site and submit, if requested by the Compliance Authority, a report containing the information in paragraphs (i) through (ii) of paragraph f,
   (i) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(ii) A description of any corrective actions taken as a part of the tune-up.

g. The permittee may delay the burner inspection specified in paragraph a. until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.7500(e), 63.7510(g), 63.7515(d), 63.7540 (a)(12) & Table 3 to Subpart DDDDD of Part 63.]

Notification, Records and Reports

J.6. Notification of Alternate Fuel Use. If the permittee intends to use a fuel other than natural gas during a period of natural gas curtailment or supply interruption, as defined in paragraph f. below, the permittee shall submit a notification of alternative fuel use to the Department within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification shall include the following information:

a. Company name and address.
b. Identification of the affected unit.
c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began.
d. Type of alternative fuel that the permittee intends to use.
e. Dates when the alternative fuel use is expected to begin and end.
f. Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

[Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.7545(f) & 63.7575.]

J.7. NESHAP Subpart DDDDD Compliance Reports Schedule. The permittee shall submit to the Department a 5-year compliance report, as applicable based on the tune-up schedule specified above, according to the requirements specified below:

a. The first compliance report must cover the period beginning on the startup date and ending on December 31st of the 5-year reporting period required for the hot water heater.
b. The first 5-year compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the startup date.
c. Each subsequent compliance report must cover the 5-year period from January 1 to December 31.
d. Each subsequent compliance report must be postmarked or submitted no later than January 31 of the year immediately following the compliance period.
e. The permittee shall submit the compliance report containing the information below:
   (1) Company and Facility name and address.
   (2) Process unit information, emissions limitations, and operating parameter limitations.
   (3) Date of report and beginning and ending dates of the reporting period.
   (4) The total operating time during the reporting period (for limited use boilers or process heaters, only).
   (5) The date of the most recent tune-up for each unit subject to the requirement to conduct a 5-year tune-up. The date of the most recent burner inspection shall be included if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
   (6) If there are no deviations from the requirements for work practice standards, a statement shall be included that there were no deviations from the work practice standards during the reporting period.
   (7) 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.

f. Electronic Submission. The permittee shall submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee shall also submit these reports to the Administrator in the format specified by the Administrator.
[Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.7550(b) & (c).]

J.8. Notification Records. The permittee shall keep the following records: A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7555(a)(1).]

J.9. Form and Duration of Records.

a. The permittee's records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

b. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

c. The permittee shall keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). Records can be kept off site for the remaining 3 years.

[Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.7560.] Link to 40 CFR 63, Subpart A - General Provisions

J.10. 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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The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
037	Emergency Reciprocating Internal Combustion Engine (RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WTP 2nd Floor Pump Room)
040	Emergency RICE (Gate D Generator)
042	Emergency RICE (Computer/IT Backup)

The following table provides important details for the following existing emergency equipment regulated under EU Nos. 037-040 and 042:

EU No.	Description (Model No.)	Engine Power Rating (kilowatts (kW))	Year Installed	Engine Horsepower (HP)	Model Year	Displacement liters/cylinder (l/c)
037	WWTP East Pump Station, Diesel CAT Engine, Serial No. 64Z31005 (Model No. 3306)	172	--	231	2000	1.75
038	Fire Pump Building, Diesel CAT Engine, Serial No. 64Z28872, (Model No. 3306)	172	--	231	1999	1.75
039	WTP 2nd Floor Pump Room, Diesel CAT Engine, Serial No. 9ZRO3166; (Model No. 3126DITA)	172	--	230	2005	0.90
040	Gate D Generator, Diesel CAT Engine, Serial No. 8JJ00301 (Model No. 3306T)	172	--	231	1996	1.75
042	Computer/IT Backup, Diesel Perkins Engine, Serial No. 147769; (Model No. 3.1524)	27	--	36	1981	0.83
Note: These emergency engines operate approximately 60 hours per year.						

{Permitting note: These stationary Reciprocating Internal Combustion Engines (RICE) are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62-204.800(11)(b), F.A.C. These RICE are exempted from regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary Internal Combustion Engines (ICE) based on the manufacturer date. These are "existing" stationary CI RICE that have not been modified or reconstructed after 6/12/2006.}

Essential Potential to Emit (PTE) Parameters

K.1. Restricted Hours of Operation. The following limitations apply individually to each engine:

a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1).]

b. *Maintenance and Testing.* Each 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i).]

c. *Non-emergency Situations.* These engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3).]

K.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 and Table 2c.1.a. & 6.a.]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6602 and Table 2c.1.b.]

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6602 and Table 2c.1.c. & 6.c.]

d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]

e. *Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h).]

f. *Oil Analysis*. The owner or operator has the option of utilizing an oil analysis program in order to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph **a.**, above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i) & (j) and Table 2c, footnote 2.]

g. *Alternative Work Practices*. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. Link to 40 CFR 63.6 [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 3.]

Monitoring of Operations

K.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f).]

Compliance

K.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a).]

K.5. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b).]

Reporting Requirements

K.6. Non-Compliance. You must report each instance in which you did not meet the requirements of this permit. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in Specific Conditions RR4. and RR7. of Appendix RR – Facility-wide Reporting requirements. [40 CFR 63.6640(b) & 63.6650(f).]

K.7. Delay of Performing Work Practice Requirements. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition **K.2**, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1.]

K.8. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), E.A.C.]

Recordkeeping Requirements

K.9. Performance and Compliance Records. The owner or operator must keep:

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted. [40 CFR 63.6655(a)(1).]
b. Records of the occurrence and duration of each malfunction of operation. [40 CFR 63.6655(a)(2).]
c. Records of all required maintenance performed on the hour meter. [40 CFR 63.6655(a)(4).]
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **K.5**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5).]
e. Records of the Work or Management Practice Standards specified in Specific Condition **K.2** [40 CFR 63.6655(d).]
f. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan. [40 CFR 63.6655(e).]
g. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f).]

K.10. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.

b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 & 40 CFR 63.10(b)(1).]

General Provisions

K.11. 40 CFR 63 Subpart A - General Provisions. The owner or operator shall comply with the following applicable requirements of 40 CFR 63, Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. Link to 40 CFR 63, Subpart A - General Provisions

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (additional terms defined in 43 CFR 63.6675)
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§ 63.6(c)(1)-(2)	Compliance dates for existing sources
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)-(5)	Initial notifications (except that §63.9(b)(3) is reserved)
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.6645(a), 63.6665 & Table 8 to Subpart ZZZZ of Part 63.]

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Subsection L. Emissions Unit 041

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

EU No.	Brief Description
041	1064 bhp Emergency Reciprocating Internal Combustion Engine (WTP plant generator)

The following table provides important details for EU 041:

EU No.	Description (Model No.)	Engine Power Rating (kilowatts (kW))	Year Installed	Engine Horsepower (HP)	Model Year	Displacement liters/cylinder (l/c)
041	Emergency RICE located at the WTP, Diesel Detroit Engine, Serial No. 378320 (Model No. 800ROZD71)	793	--	1064	1998	1.50
Note: This engine operates approximately 60 hours per year.						

{Permitting Note: This emissions unit is a compression ignition (CI) engine, regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62-204.800(11)(b), F.A.C. This permit section addresses "existing" stationary CI RICE that are greater than 500 HP that are located at a major source of HAP and that have not been modified or reconstructed after 12/19/2002. Unless the RICE is modified or reconstructed after 7/11/2005, NSPS 40 CFR 60, Subpart IIII, will not apply. The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}

Essential Potential to Emit (PTE) Parameters

L.1. Restricted Hours of Operation. The following limitations apply individually to each engine:

a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i).]

c. *Non-emergency Situations.* These engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3).]

Compliance

L.2. Continuous Compliance. This unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a).]

L.3. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a

manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b).]

Reporting Requirements

L.4. 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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Subsection M. Emissions Unit 046

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

EU No.	Brief Description
046	275 HP Emergency Diesel-Fired Generator

The following table provides important details for EU 046:

EU No.	Description (Model No.)	Engine Power Rating (kilowatts (kW))	Year Installed	Engine Horsepower (HP)	Model Year	Displacement liters/cylinder (l/c)
046	John Deere, (Model No. 6068HF485)	--	--	275	2020	1.13
Note: This engine provides emergency power to the refinery processing building.						

{Permitting Note: This compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. and 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Pursuant to 40 CFR 63.6590(c), this engine shall comply with the requirements of 40 CFR 63, Subpart ZZZZ, by complying with the applicable requirements contained in 40 CFR 60, Subpart IIII, adopted in Rules 62-204.800(11)(b) & (8)(b), F.A.C., respectively. This "new" stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP, that have been modified, reconstructed or commenced construction on or after 6/12/2006, and have a post-2007 model year.}

Essential Potential to Emit (PTE) Parameters

M.1. Authorized Fuel. This Stationary Reciprocating Internal Combustion Engine (RICE) must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b), 80.510(b).]

M.2. Restricted Hours of Operation. The following limitations applies to this engine:

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)(1).]

b. *Other Situations*. The 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 60.4211(f)(2)(i).]

c. *Non-Emergency Situations*. The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3).]

Emission Limitations and Operation Requirements

M.3. NMHC + NO_X Emissions. Emissions of NO_X + NMHC shall not exceed 4.0 g/kW-hr (3.0 g/HP-hr). [40 CFR 60.4205(c) & Table 4.]

M.4. CO Emissions. CO emissions shall not exceed 3.5 g/kW-hr (2.6 g/HP-hr). [40 CFR 60.4205(C) & Table 4.]

M.5. PM emissions. Particulate matter emissions shall not exceed 0.20 g/KW-hr (0.15 g/HP-hr). [40 CFR 60.4205(c) & Table 4.]

Monitoring of Operations

M.6. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a).]

Testing and Compliance Requirements

M.7. Operation and Maintenance. The owner or operator must operate and maintain the engine according to the manufacturer's written instructions. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The RICE must be maintained and operated to meet the emissions limits in Specific Conditions **M.3.-M.5**, over the entire life of the engine. [40 CFR 60.4206 & 4211(a).]

M.8. Engine Certification Requirements. The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **M.9.** [40 CFR 60.4211(c).]

M.9. Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, 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 applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(c) & (g).]

M.10. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **M.9.**, the following requirements shall be met:

a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. Link to Subpart F

b. *NTE Standards*. Exhaust emissions from this engine must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standards (STD) in Specific Conditions **M.3.– M.5**, determined from the following equation:

NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)

[40 CFR 60.4212(a) & (c).]

M.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.]

Records and Reports

M.12. Hours of Operation Records. The owner or operator must keep records of the operation of this engine in emergency and non-emergency services 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. [Rule 62-204.800(8)(b)80, F.A.C.; and, 40 CFR 60.4214(b).]

M.13. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Conditions **M.9. & M.10.**, the owner or operator must keep the following records:

a. Engine manufacturer documentation and certification indicating compliance with the standards.
b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
c. 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.

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

M.14. Testing Notification. At such time that the requirements of Specific Condition **M.10.** become applicable, the owner or operator shall notify the Compliance Authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1), F.A.C.]

General Provisions

M.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 40 CFR 60, Subpart A - General Provisions.

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.9	Availability of information
§ 60.10	State Authority
§ 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 60.4218]

M.16. NSPS Subpart IIII Applicability. The 275 HP engine is an Emergency Stationary Compression Ignition Internal Combustion Engine (Stationary ICE) and shall comply with applicable provisions of 40 CFR 60, Subpart IIII. [40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.]

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Subsection N. Emissions Unit 047

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

EU No.	Brief Description
047	Six Propane-Fired Generators

The following table provides important details for the following new emergency equipment regulated under EU 047:

EU No.	Description (Model No.)	Engine Power Rating (kilowatts (kW))	Year Installed	Engine Horsepower (HP)	Model Year	Displacement liters/cylinder (l/c)
047	Refinery Packaging Building Emergency Generator; Generac, 530 cc Displacement (Model No. G0064390)	11	2019	14.8	2019	0.27
	Power Generation Area Emergency Generator; Generac (Model No. SG060)	60	2019	82	2019	0.68
	Pallet Warehouse Emergency Generator; Generac (Model No. G0070431)	22	2019	29.5	2019	0.5
	Depot Emergency Generator; Generac (Model No. G0070433)	22	--	29.5	2021	0.5
	Gate A Emergency Generator; Generac (Model No. G00704311)	22	--	29.5	2023	0.5
	Maintenance of Way Emergency Generator; Generac (Model No. RG03224A NAX)	32	--	42.9	2021	0.6

Note: The Refinery Packaging Building emergency generator has a displacement greater than 225 cubic centimeters (cc) and was installed after January 1, 2011.

{Permitting Note: These spark ignition internal combustion engines (SI ICE) are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), adopted in Rules 62.204.800(11)(b)82, F.A.C.; and 40 CFR 60, Subpart A (General Provisions), and Subpart JJJJ (Standards of Performance for Stationary SI ICE), adopted in Rule 62.204.800(8)(b)83, F.A.C. In accordance with provisions of 40 CFR 63.6590(c), meeting the requirements of 40 CFR 60, Subpart JJJJ, satisfies compliance with the requirements of Subpart ZZZZ.}

Essential Potential to Emit (PTE) Parameters

N.1. Restricted Hours of Operation. The following limitations apply individually to each engine, the permittee shall 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 these engines in emergency situations. [40 CFR 60.4243(d)(1).]

b. *Maintenance and Testing.* Each emergency stationary ICE may be operated 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, regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4243(d)(2)(i).]

c. *Other Non-Emergency Situations*. Each emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph **b.**, above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4243(d)(3).]

Emissions Standards

N.2. Emissions Limits. Exhaust emissions from these engines shall not exceed the levels for each pollutant shown in the table below:

Description	kW (HP)	Emissions Limit Rule Reference	Emissions Limits, g/HP-hr	
			NO_X + HC	CO
Refinery Packaging Building Emergency Generator	11 (14.8)	40 CFR 60.4233(a) & 60.4231(a); and, Table 1 to 40 CFR 1054.105	5.9	454.8
Power Generation Area Emergency Generator	60 (82)	40 CFR 60.4233(d) and Table 1 to 40 CFR 60, Subpart JJJJ	10	387
Pallet Warehouse Emergency Generator	22 (29.5)	40 CFR 60.4233(d) and Table 1 to 40 CFR 60, Subpart JJJJ	10	387
Depot Emergency Generator; Generac (Model No. G0070433)	22 (29.5)	40 CFR 60.4233(d) and Table 1 to 40 CFR 60, Subpart JJJJ	10	387
Gate A Emergency Generator; Generac (Model No. G00704311)	22 (29.5)	40 CFR 60.4233(d) and Table 1 to 40 CFR 60, Subpart JJJJ	10	387
Maintenance of Way Emergency Generator; Generac (Model No.	32 (42.9)	40 CFR 60.4233(d) and Table 1 to 40 CFR 60, Subpart JJJJ	10	387

Description	kW (HP)	Emissions Limit Rule Reference	Emissions Limits, g/HP-hr	
			NO_X + HC	CO
RG03224ANAX)				

Monitoring Requirements

N.3. Hour Meter. You must operate and maintain a non-resettable hour meter on this engine. [40 CFR 60.4237(b) & (c).]

Testing and Compliance Requirements

N.4. Operation and Maintenance. The owner or operator must operate and maintain these engines to achieve the emission standards specified in Specific Condition **N.2**. over the entire life of the engine. [40 CFR 60.4234.]

N.5. Compliance Requirements. The permittee must demonstrate compliance according to one of the following options:

a. *Certified Engine Operated According to Manufacturer*. If permittee purchased an engine certified to meet the emissions limits in Specific Conditions **N.2.**, 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 demonstrate compliance as follows: 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, but no performance testing is required. [40 CFR 60.4243(a)(2)(i).]

Notification, Records and Reports

N.6. Compliance Records. You must keep records of the following information:

a. All notifications submitted to comply with this permit and all documentation supporting any notification.
b. Maintenance conducted on the engine.
c. If the stationary SI internal combustion engine 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 1054, as applicable. Link to eCFR
d. If a certified engine operating in a non-certified manner and subject to Specific Condition **N.5**.(2), documentation that the engine meets the emission standards.

[40 CFR 60.4245(a).]

N.7. Hours of Operation Records. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter and must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b).]

N.8. 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

N.9. 40 CFR 60 Subpart JJJJ - Applicability of General Provisions. The owner or operator shall comply with the following applicable requirements of Table 3 to Subpart JJJJ of Part 60-Applicability of General Provisions to Subpart JJJJ. [As stated in 40 CFR 60.4246, the permittee must comply with the following applicable General Provisions.]

General Provisions Citation	Subject of Citation
§60.1	General applicability of the General Provisions
§60.2	Definitions
§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
§60.8	Performance tests
§60.9	Availability of information
§60.10	State Authority
§60.11	Compliance with standards and maintenance requirements
§60.12	Circumvention
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