

Okeelanta Corporation
Okeelanta Sugar Mill and Refinery

Facility ID No. 0990005

New Hope Power Company **(NHPC)**
Okeelanta Cogeneration Plant

Facility ID No. 0990332

Palm Beach County

Title V Air Operation Permit Revision

Permit No. 0990005-049051-AV

(Renewal of Title V Air Operation Permit No. 0990005-044-AV)



Permitting Authority:

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Division of Air Resource Management
Permit Review Section
2600 Blair Stone Road
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Title V Air Operation Permit Renewal

Permit No. 0990005-051-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
Placard Page	1
Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Units.	2
C. Applicable Regulations.	4
Facility-wide Conditions.	5
Emissions Units and Conditions.	
A. EUs 001-003: Cogeneration Boilers.	8
B. EU 004: Cogeneration Plant – Material Handling and Storage.	20
C. EU 007: Cogeneration Plant – Emergency Fire Pumps.	23
D. EUs 008 & 009: Cogeneration Plant – Emergency CI Engines.	27
E. EU 010: Cogeneration Plant – Sugar Mill Refinery Package Boiler.....	31
F. EUs 021-025, 034, 035, 043, 054, 055 & 059: Okeelanta – Sugar Refinery.	37
G. EUs 018 – 019, 020, 030, 045, & 046 & 049: Okeelanta – Transshipment Facility	43
H. EU 048: Okeelanta – Paint Spray Booth.	46
I. EU 060: Okeelanta – Emergency Fire Pumps.	48
J. EUs 061 & 062: Okeelanta – Non-Emergency CI Engines.	52
K. EU 057: Okeelanta – 300 HP Gas-Fired Boiler.	56
L. EU 063: Okeelanta – DC Fire Pump.	58
Appendices. See Appendices Document.	
Appendix A. Glossary.	
Appendix AM. Ash Management Plan.	
Appendix CAM. Compliance Assurance Monitoring Plan.	
Appendix CP. Compliance Plan.	
Appendix FM. Fuel Management Plan.	
Appendix GC. Good Combustion Plan, Cogeneration Boilers.	
Appendix OM. Operation and Maintenance Plans, Cogeneration Boilers.	
Appendix QR. Quarterly Report, Cogeneration Boilers.	
Appendix AMP. Alternative Monitoring Procedure for Demonstrating Compliance with the Cogeneration Boilers MACT HCI Emissions Limit (ASP 17-C-AP issued by FDEP on 02/24/2017).	
Appendix I. List of Insignificant Emissions Units and/or Activities.	
Appendix NSPS, Subpart A – General Provisions.	
Appendix NSPS, Subpart Da – <u>Standards of Performance for</u> Electric Utility Steam Generating Units.	
Appendix NSPS, Subpart Db – <u>Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units</u>	
Appendix NSPS, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	
Appendix NESHAP, Subpart A – General Provisions.	
Appendix NESHAP, Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.	
Appendix NESHAP, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines.	
Appendix RR. Facility-Wide Reporting Requirements.	
Appendix TR. Facility-Wide Testing Requirements.	
Appendix TV. Title V General Conditions.	

Appendix U. List of Unregulated Emissions Units and/or Activities.

Referenced Attachments. At End of Appendices Document.

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and
Monitoring System Performance (40 CFR 60, July 1996).

Table H, Permit History.

DRAFT



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Jeanette Nuñez
Lt. Governor

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PERMITTEE:

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8001 U.S. Highway 27 South
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Permit No. 0990005-051-AV
Okeelanta Sugar Mill and Refinery
Facility ID No. 0990005
Okeelanta Cogeneration Plant
Facility ID No. 0990332
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 Okeelanta Sugar Mill and Refinery is in Palm Beach County at 8001 U.S. Highway 27 South, South Bay. UTM Coordinates are: Zone 17, 524.90 kilometers (km) East and 2940.10 km North. Latitude is: 26°35'00" North; and, Longitude is: 80°45'00" 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.

0990005-051-AV Effective Date: DATE, 20xx
Renewal Application Due Date: Exp. DATE -225, 20zz
Expiration Date: Eff. DATE + 5 years, 20zz

(Draft)

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

DLR/srl

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The facility consists of two adjacent plants. Okeelanta Corporation (ARMS ID No. 0990005) operates an existing sugar mill (SIC No. 2061) and sugar refinery (SIC No. 2062) including sugar packaging and transshipment activities. New Hope Power Company (ARMS ID No. 0990332) operates an existing 140-megawatt (MW) cogeneration plant (nominal generating capacity) that provides process steam for the sugar mill and refinery operations as well as generating electricity for sale to the power grid (SIC 4911). The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the PSD and Title V regulatory programs.

The primary sources of air pollution include: three 760 million British thermal units per hour (MMBtu/hour) cogeneration boilers; one 337.7 MMBtu/hour package boiler to support the cogeneration boilers; transfer and storage of wood chip and bagasse fuels; transfer and storage of sugar; a paint spray booth; and multiple emergency and non-emergency engines. The facility includes other miscellaneous unregulated emissions units and activities.

Subsection B. Summary of Emissions Units.

ARMS ID No. 0990005 – Okeelanta Corporation

EU No.	Emissions Unit Description	Process Area
<i>Regulated Emissions Units</i>		
018	<u>Central Vacuum System No. 1</u>	<u>Transshipment Facility</u>
019	Sugar Packaging Lines 0-4, 5A and 9	Transshipment Facility
020	Sugar Grinder	Transshipment Facility
021	<u>Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1</u>	<u>Sugar Refinery</u>
022	Central Dust Collection System No. 2 with Rotoclone (No.2) "B" System	Sugar Refinery
023	Cooler No. 1 with Rotoclone No. 3	Sugar Refinery
024	Cooler No. 2 with Rotoclone No. 4	Sugar Refinery
025	Fluidized Bed Dryer/Cooler with Baghouse	Sugar Refinery
030	Sugar Silos Nos. 1, 2, and 3 (Points #1101-1103)	Transshipment Facility
034	Bulk Load-Out Operation with baghouse	Sugar Refinery
035	Transfer Bulk Load-Out Station	Sugar Refinery
043	Sugar Refinery Alcohol Usage	Sugar Refinery
045	Powdered Sugar Dryer/Cooler, Packaging Lines 8A, 8B, 12, 13, and 14	Transshipment Facility
046	Powdered Sugar Grinder	Transshipment Facility
048	Paint Booth	Okeelanta Shop
049	<u>Baghouse (currently inactive)</u>	<u>Transshipment</u>
054	"A" System – Wet Rotoclone (No. 6)	Sugar Refinery
055	"C" System – Wet Rotoclone (No. 7)	Sugar Refinery
057	Specialty Sugar Product 300 hp gas-fired package boiler	Refined Sugar Warehouse No. 3
059	Pkg. Lines 17, 18, 19 and bulk bag line with baghouse	Warehouse 3
060	Okeelanta – Emergency Fire Pumps	Okeelanta Sugar Mill
061	Okeelanta – Non-Emergency CI Engines (Tier 3 Certified)	Okeelanta Sugar Mill

SECTION I. FACILITY INFORMATION.

EU No.	Emissions Unit Description	Process Area
062	Okeelanta – Non-Emergency CI Engine (Tier 4 Certified)	Okeelanta Sugar Mill
063	DC Fire Pump	Okeelanta Sugar Mill
<i>Unregulated Emissions Units and Activities</i> (see Appendix U, List of Unregulated Emissions Units and/or Activities)		
033	Sugar Refinery Miscellaneous Support Equipment	Sugar Refinery
036	Shop Operations	Sugar Mill
037	Sugar Mill Boiler House	Sugar Mill
038	Sugarcane Dumping Area	Sugar Mill
039	Sugarcane Processing Facility	Sugar Mill
040	Fuel Tank Farm	Facility
041	Potable Water System	Facility
042	Sewer Plant	Facility
044	Okeelanta Facility - Miscellaneous Unregulated Activities	Okeelanta Facility
050	Transshipment Facility, Miscellaneous Support Equipment	Transshipment Facility

ARMS ID No. 0990332 – New Hope Power Company

EU No.	Emissions Unit Description	Process Area
<i>Regulated Emissions Units</i>		
001	Cogeneration Boiler A	Cogeneration Plant
002	Cogeneration Boiler B	Cogeneration Plant
003	Cogeneration Boiler C	Cogeneration Plant
004	Cogeneration Plant – Material Handling and Storage	Cogeneration Plant
007	Cogeneration Plant – Emergency Fire Pumps	Cogeneration Plant
008	Cogeneration Plant – NHPC Fire Water Makeup (Emergency RICE)	Cogeneration Plant
009	Cogeneration Plant – Air Compressor #2 (Emergency RICE)	Cogeneration Plant
010	Sugar Mill Refinery Package Boiler	Cogeneration Plant
<i>Unregulated Emissions Units and Activities</i> (see Appendix U, List of Unregulated Emissions Units and/or Activities)		
005	Cogeneration Plant – Miscellaneous Support Equipment	Cogeneration Plant

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

SECTION I. FACILITY INFORMATION.

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received August 3, 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. (ARMS ID 0990005)	EU No. (ARMS ID 0990332)
<i>Federal Rule Citations</i>		
40 CFR 60, Subpart A, NSPS General Provisions	061, 062, 063	001, 002, 003, 008, 009
40 CFR 60, Subpart Da, Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978		001, 002, 003
<u>40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units</u>		<u>010</u>
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	061, 062, 063	008, 009
40 CFR 63, Subpart A, NESHAP General Provisions	057, 060, 061, 062, 063	001, 002, 003, 007, 008, 009
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines	060, 061, 062, 063	007, 008, 009
40 CFR 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.	057	001, 002, 003
<i>State Rule Citations</i>		
Rule 62-213.400, F.A.C., Prevention of Significant Deterioration.		001, 002, 003
Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)		001, 002, 003
Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with More Than 250 MMBtu/hour Heat Input.		001, 002, 003
Rule 62-296.406, F.A.C., Fossil Fuel Fired Steam Generators with Less Than 250 MMBtu/hour Heat Input.	057	
Rule 62-296.410, F.A.C., Carbonaceous Fuel Burning Requirements.		001, 002, 003
<u>Rule 62-296.570, F.A.C., F.A.C., Reasonably Available Control Technology (RACT) – Requirements for Major VOC- and NOx-Emitting Facilities</u>		<u>010</u>

[TABLE OF CONTENTS](#)

SECTION II. FACILITY-WIDE CONDITIONS.

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. Where practicable, enclose or cover conveyor systems.
- b. Minimize drop distances or dry materials when handling.
- c. As necessary, provide wind breaks around material handling equipment.
- d. Where possible, confine abrasive blasting.
- e. As necessary, paving and maintenance of roads, parking areas and yards.
- f. As necessary, use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. As necessary, provide landscape and/or vegetation.
- h. As necessary, remove dust from roads, work areas, parking areas, and other paved areas under the control of the permittee to prevent fugitive dust emissions.
- i. As necessary, apply water or other dust suppressants to control emission from unpaved roads, yards, and other activities such as road grading, land clearing, and the demolition of buildings.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received August 3, 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

SECTION II. FACILITY-WIDE CONDITIONS.

(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, Post Office Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <https://floridadep.gov/air/permitting-compliance/content/title-v-fees>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

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

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

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

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

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

1. 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: <https://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.
2. 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

SECTION II. FACILITY-WIDE CONDITIONS.

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. [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	FW9 [Rule 62-213.440(1)(b)3.a., F.A.C. & 40 CFR 70.6(a)(3)(iii)(A)]
Emissions Units 001-003 – Cogeneration Boilers A, B, and C		
Report	Reporting Deadline	Related Condition(s) and Regulation(s)
NESHAP Semiannual Reports	Within 60 days after the end of each calendar half (with Facility-Wide Reports in FW9)	A.26 [40 CFR 63.7550(a) & (b)(5)]
NSPS Reporting Requirements		A.27 [40 CFR 60.51]
Emissions Unit No. 010 – Sugar Mill and Refinery Package Boiler		
Report	Reporting Deadline	Related Condition(s)
NSPS Excess Emissions Reports	Within 60 days after the end of each calendar half (with Facility-Wide Reports in FW9)	E.17 [40 CFR 60.49b(h)(2) & (i)]
NESHAP Annual Compliance Reports	Within 60 days after the end of each calendar year	E.18 [40 CFR 63.7550]
Emissions Unit No. 057 – 300-HP Gas-Fired Boiler		
Annual Compliance Report	Within 60 days after the end of each calendar year	K.12 [40 CFR 63.7550]

(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.}

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

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

EU No.	Brief Description
001	Cogeneration Boiler A
002	Cogeneration Boiler B
003	Cogeneration Boiler C

Each unit is a hybrid suspension grate boiler manufactured by Zurn and designed to produce approximately 506,100 pounds per hour (lb/hour) of steam at 1500 pounds per square inch, gage (psig) and 975 degrees Fahrenheit (°F).

The primary fuel is biomass at a heat input rate of 760 MMBtu/hour, which includes bagasse from the adjacent sugar mill and clean wood material delivered to the plant by area subcontractors. Auxiliary fuels include natural gas at a heat input rate of 400 MMBtu/hour and distillate oil at a heat input rate of 490 MMBtu/hr.

Pollution control equipment includes low-NO_x burners for gas firing, a selective non-catalytic reduction (SNCR) system to reduce nitrogen oxides emissions (NO_x), and mechanical dust collectors and an electrostatic precipitator (ESP) to reduce particulate matter (PM) emissions. Good operating practices and the efficient combustion of clean, low-sulfur fuels minimizes emissions of carbon monoxide (CO), sulfuric acid mist (SAM), sulfur dioxide (SO₂), and VOC. Exhaust gases exit a stack that is 10 feet in diameter and at least 199 feet tall with a volumetric flow rate of approximately 319,000 actual cubic feet per minute (acfm) at 352°F.

{Permitting notes: The following describes the primary applicable requirements for these boilers.}

State regulations: These emissions units are regulated under Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators with More than 250 MMBtu/hour Heat Input), Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment), and Rule 62-213.440(1)(b), F.A.C. (Compliance Assurance Monitoring (CAM) for particulate matter (PM). In accordance with Rule 62-212.400 (PSD), F.A.C., Permit No. PSD-FL-196 (as modified) subjected these units to a BACT determination for CO, NO_x, Pb, PM/PM₁₀, SAM, fluorides (Fl), SO₂ and VOC.

Federal Regulations: These emissions units are regulated under 40 CFR 60, Subpart A (General Provisions), 40 CFR 60, Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978), 40 CFR 63 Subpart A (General Provisions), and, 40 CFR 63 subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters).

Acid Rain: The cogeneration plant is currently classified as a “Qualifying Cogeneration Facility” under 40 CFR Part 72 and is exempt from Acid Rain permitting. However, to maintain the exemption as a qualifying cogeneration facility, total electrical generation may not exceed 219,000 megawatt-electrical-hours (MWe-h) per unit per year based on a 3-year average. It is possible that the cogeneration boilers will later become subject to the Title IV Acid Rain provisions.

40 CFR 63, Subpart UUUUU Applicability: The cogeneration boilers will become subject to this subpart if oil use at the facility meets the criteria in the following definition:

“Oil-fired electric utility steam generating unit means an electric utility steam generating unit meeting the definition of “fossil fuel-fired” that is not a coal-fired electric utility steam generating unit and that burns oil for more than 10.0 percent of the average annual heat input during any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year.”}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each cogeneration boiler shall not exceed 760 MMBtu/hour when burning 100 percent biomass, 400 MMBtu/hour when burning 100 percent natural gas, and 490 MMBtu/hour when burning 100 percent distillate oil. The steam production rate of each boiler shall not exceed an average of 506,100 lb/hour at 1,500 psig and 975°F. [Rules 62-4.070(3), 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.; and, Permit No. 0990332-024-AC (PSD-FL-196R)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

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

- Biomass (bagasse and authorized wood material).** Bagasse is the fibrous vegetative residue remaining after the sugarcane milling process. Authorized wood material is clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter. Each cogeneration boiler shall combust no more than 30 percent by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste in 40 CFR 60.51a.
- Distillate Oil.** The maximum sulfur content of distillate oil is limited to 0.05% by weight. The distillate oil heat input to each cogeneration boiler during any calendar quarter is not limited.
- Natural gas.** The natural gas heat input to each cogeneration boiler during any calendar quarter is not limited.

The permittee shall abide by the Ash and Fuel Management Plans specified in Appendices AM and FM of this permit.

[Rules 62-4.070(3), 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.; and, Permit No. 0990332-024-AC (PSD-FL-196R)]

{Permitting Note: Each boiler was originally designed to fire low sulfur coal as an emergency backup fuel, but no transfer, crushing, or storage systems were ever installed. The permittee shall obtain an air construction permit before firing any other fuel (including coal) not specifically authorized by this permit.}

A.4. Hours of Operation. These emissions units may operate continuously (i.e., 8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990332-025-AC(PSD-FL-196S)]

Control Technology

A.5. Control Equipment. Each cogeneration boiler shall be equipped with:

- Low-NO_x burners:** Low-NO_x natural gas burners rated for no more than 0.15 lb of NO_x per MMBtu of heat input. Four burners are installed with one in each corner of the boiler. The maximum heat input rate from all four burners is 400 MMBtu/hour.
- Mechanical dust collectors:** Mechanical dust collectors consisting of four, large diameter, multi-tube modules with airfoil vanes or equivalent equipment. The mechanical dust collectors shall be installed and maintained as pre-control devices prior to each ESP and designed for a removal efficiency of at least 85 percent of the PM greater than 10 microns in size (assuming a specific gravity of 2.00).
- ESP:** An electrostatic precipitator designed for at least 98 percent removal of particulate matter.
- SNCR:** A selective non-catalytic reduction system designed for at least 40 percent removal of NO_x.

The permittee shall abide by the O&M plans for the cogeneration plant control equipment specified in Appendix OM of this permit.

[Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-014-AC (PSD-FL-196M) and 0990332-020-AC (PSD-FL-196Q)]

~~*{Permitting Note: As the boilers demonstrated compliance with the mercury standard without injecting activated carbon, an activated carbon injection (ACI) system was removed from the site. In the event that an ACI system (or equivalent) must be used to control mercury emissions from these units, it will be rented or permanently installed back in.}*~~

A.6. Good Combustion Practices (GCP). Emissions of CO and VOC shall be minimized by ensuring efficient combustion through the proper application of GCPs. The boiler operators shall follow the procedures for “good combustion practices” identified in Appendix GC of this permit. [Rule 62-4.070(3), and, Permit No. 0990332-020-AC (PSD-FL-196Q)]

A.7. Circumvention. The owner or operator shall not circumvent or operate the air pollution control equipment in such a manner which would violate allowable emission rates established for these units. [Rule 62-210.650, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

Emission Limitations and Standards

A.8. Emissions Standards. Unless otherwise specified, the averaging period for an emissions standard is based on the averaging period specified in the applicable test method. Based on the maximum permitted heat input to each cogeneration boiler, stack emissions shall not exceed the following emissions standards:

- a. CO Emissions. As determined by continuous emissions monitoring system (CEMS), emissions of CO shall not exceed the following emission standards:
 - (1) Each cogeneration boiler shall not exceed 0.50 lb/MMBtu based on a 30 operating day rolling average, 0.35 lb/MMBtu based on a 12-month rolling average and 380.0 lb/hour. [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
 - (2) Each cogeneration boiler shall not exceed 900 parts per million by volume dry at 3% oxygen (ppmvd @ 3% O₂) based on a 30-day rolling average, except during periods of startup and shutdown. [Rule 62-204.800(11)(b)86, F.A.C.; and, 40 CFR 63.7500 and Table 2]
- b. NO_x Emissions. As determined by CEMS, each cogeneration boiler shall not exceed 0.15 lb/MMBtu based on a 30 operating day rolling average and 114.0 lb/hour, compliance with these emission limits will demonstrate compliance with the following emission standards. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0990332-020-AC (PSD-FL-196Q)]
 - (1) Each cogeneration boiler shall not exceed 0.60 lb/MMBtu based on a 30 operating day rolling average when firing solid fuels at 760 MMBtu/hour. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.44Da]
 - (2) Each cogeneration boiler shall not exceed 0.30 lb/MMBtu based on a 30 operating day rolling average when firing liquid fuels at 490 MMBtu/hour. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.44Da]
 - (3) Each cogeneration boiler shall not exceed 0.20 lb/MMBtu based on a 30 operating day rolling average when firing gaseous fuels at 400 MMBtu/hour. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.44Da]
- c. SO₂ Emissions.
 - (1) As determined by CEMS, each cogeneration boiler shall not exceed 0.20 lb/MMBtu based on a 24-hour rolling average, 0.10 lb/MMBtu based on a 30-operating day rolling average, 0.06 lb/MMBtu based on a 12-month rolling average, and 152.0 lb/hour, compliance with these emission limits will demonstrate compliance with the following emission standards. [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
 - (a) Each cogeneration boiler shall not exceed 0.15 lb/MMBtu based on a 30 operating day rolling average when firing solid fuels at 760 MMBtu/hour. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.43Da]
 - (b) Each cogeneration boiler shall not exceed 0.20 lb/MMBtu based on a 30 operating day rolling average when firing No. 2 fuel oil at 490 MMBtu/hour. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.43Da]
 - (2) As determined by fuel analysis, No. 2 fuel oil fired in the cogeneration boilers shall not exceed a maximum sulfur content of 0.05% sulfur by weight. [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
- d. VOC Emissions. As determined by stack test, emissions of VOC from each cogeneration boiler shall not exceed 0.05 lb/MMBtu and 38.0 lb/hour. [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
- e. PM Emissions. As determined by stack test, each cogeneration boiler shall not exceed 0.026 lb/MMBtu and 19.8 lb/hour. Compliance with these emission limits will demonstrate compliance with the following emission standards. For purposes of reporting PM₁₀ emissions, it shall be assumed that all PM emitted is PM₁₀. [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
 - (1) Each cogeneration boiler shall not exceed 0.03 lb/MMBtu. [Rules 62-204.800(8)(b)2 and 62-296.405, F.A.C.; and, 40 CFR 60.42Da]
 - (2) Each cogeneration boiler shall not exceed 0.2 lb/MMBtu of heat input of carbonaceous fuel plus 0.1

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

- lb/MMBtu of heat input of fossil fuel. [Rule 62-296.410, F.A.C.]
- (3) Each cogeneration boiler shall not exceed 0.44 lb/MMBtu of filterable PM.
[Rule 62-204.800(11)(b)86, F.A.C.; and, 40 CFR 63.7500 and Table 2]
- f. Mercury Emissions. As determined by stack test, emissions of mercury shall not exceed the following emission standards:
- (1) Each cogeneration boiler shall not exceed 5.4×10^{-6} lb/MMBtu. [Rules 62-204.800(11)(b)86 & 62-212.400(BACT), F.A.C., 40 CFR 63.7500 and Table 2; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
- (2) Before October 6, 2025, each cogeneration boiler shall not exceed 5.7×10^{-6} lb/MMBtu. [Rule 62-204.800(11)(b)86, F.A.C.; and, 40 CFR 63.7500 and Table 152]
- g. Hydrogen Chloride (HCl). As determined by stack test, emissions of HCl from each boiler shall not exceed the following emission limits, except during periods of startup and shutdown:
- a. Before October 6, 2025, 0.022 lb/MMBtu of heat input. [Rule 62-204.800(11)(b)86, F.A.C.; and 40 CFR 63.7500(a) and Table 15]
- b. On or after October 6, 2025, 0.020 lb/MMBtu of heat input. [Rule 62-204.800(11)(b)86, F.A.C.; and 40 CFR 63.7500 and Table 2]
- h. Lead and Fluoride Emissions. The BACT determination for lead and fluoride emissions is the use of fuels containing low levels of these compounds (bagasse, wood, distillate oil, and natural gas) and prospective removal with the fly ash by the mechanical dust collectors and electrostatic precipitators (ESP). The PM BACT emission standard is a surrogate standard for lead emissions. *{Permitting Note: For reporting purposes, average lead emissions are expected to be 2.6×10^{-5} lb/MMBtu and average fluoride emissions are expected to be 1.9×10^{-4} lb/MMBtu when firing bagasse/wood.}* [Rule 62-212.400(BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
- i. Visible Emissions. As determined by COMS, visible emissions shall not exceed the following limits:
- (1) Each cogeneration boiler shall not exceed 20% opacity, except for one 6-minute block per hour not more than 27% opacity, compliance with these limits will demonstrate compliance with the following emission standards. [Rules 62-204.800(8)(b)2, 62-212.400(BACT) and 62-296.405, F.A.C.; 40 CFR 60.42Da; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]
- (2) Each cogeneration boiler shall not exceed 30% opacity except that a density of 33% opacity shall be allowed for one six-minute period in any one-hour period. [Rule 62-296.410, F.A.C.] *{Permitting Note: Compliance with the 20% opacity, except for one 6-minute block per hour not more than 27% opacity, will demonstrate compliance with this limit (see Specific Condition A.8.i.(1).}*
- (3) Each cogeneration boiler shall not exceed 10% opacity as a daily block average. [Rule 62-204.800(11)(b)86, F.A.C.; and NESHAP Subpart DDDDD of 40 CFR 63 and Table 4] *{Permitting Note: The Subpart DDDDD opacity limit is an operating limit, not an emissions limit. Exceedance of the operating limit requires corrective action and reporting.}*

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.9. Excess Emissions. Excess emissions resulting from startup, shutdown, or malfunction of each cogeneration boiler 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. 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. [Rule 62-210.700(1), F.A.C.; and, Permit No. 0990332-017-AC (PSD-FL-196(P))]

A.10. Excess Emissions Allowed. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

- A.11. Continuous Monitoring System Data Exclusion.** Each continuous monitoring system shall operate and record data during all periods of operation including startup, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Provided the operators implement best operational practices to minimize the amount and duration of emissions, the following conditions apply. Pursuant to Rules 62-210.700(1) and (4), F.A.C., these conditions consider the variations in operation of the cogeneration boilers.
- Natural gas or distillate oil shall be fired during startup prior to energizing the ESP. The ESP shall be placed on line at the earliest possible time during the startup period, consistent with the manufacturer's recommendations, operating experience and safety practices. Once the ESP is placed on line, the boiler shall comply with the specified opacity standard. The ESP shall be on line and functioning properly before firing any biomass. The opacity limit does not apply when the ESP is off line due to warm startup, cold startup, or shutdown. No more than twenty 6-minute block averages of opacity monitoring data shall be excluded in a 24-hour period due to documented malfunctions.
 - Hourly CO and NO_x emission rate values collected during startup, shutdown, or documented malfunction may be excluded from the 30-day and/or 12-month compliance averages. No more than six hourly emission rate values (CO or NO_x) shall be excluded in a 24-hour period due to a cold startup. No more than three hourly emission rate values (CO or NO_x) shall be excluded in a 24-hour period due to a warm startup. No more than two hourly emission rate values (CO or NO_x) shall be excluded in a 24-hour period due to a malfunction. No more than two hourly emission rate values (CO or NO_x) shall be excluded in a 24-hour period due to a shutdown. For each cogeneration boiler, no more than 183 hourly emission rate values shall be excluded during any calendar quarter.
 - All valid hourly SO₂ emission rate values shall be included in all of the compliance averages. [40 CFR 60.49Da; Rules 62-4.070(3), 62-210.200, and 62-210.700, F.A.C.; and, Permit Nos. 0990005-016-AC & 0990332-020-AC (PSD-FL-196Q)]

A.12. NESHAP Startup and Shutdown Requirements. The 40 CFR 63, Subpart DDDDD standards apply at all times the cogeneration boilers are operating, except during periods of startup and shutdown during which time, the permittee must comply only with items 5 and 6 of Table 3 to Subpart DDDDD (see Appendix NESHAP Subpart DDDDD). [40 CFR 63.7500(f) & 63.7540(d)]

Monitoring of Operations

- A.13. CAM plan.** These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM in Section IV of this permit. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.]

Continuous Emissions Monitoring Requirements

- A.14. CEMS and COMS.** For each cogeneration boiler, the permittee shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to continuously measure and record the opacity and a continuous emissions monitoring system (CEMS) to continuously measure and record emissions of CO, NO_x, CO₂ (for O₂), and SO₂ in a manner sufficient to demonstrate compliance with the standards of this permit.
- Location of Data Collected.* Each monitor shall be located in the ductwork between the electrostatic precipitator and the stack (or in the stack) to obtain emissions measurements representative of actual stack emissions.
 - Performance Specifications.* Each CEMS and COMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements.
 - COMS shall comply with Performance Specification 1 in Appendix B of 40 CFR 60.
 - The NO_x and SO₂ CEMS shall comply with Performance Specification 2 in Appendix B of 40 CFR 60. The SO₂ reference method for the annual RATA shall be EPA Method 6 (or 6C) in Appendix A of 40 CFR 60. The NO_x reference method for the annual RATA shall be EPA Method 7 (or 7E) in Appendix A of 40 CFR 60.
 - The CO₂ CEMS shall comply with Performance Specification 3 in Appendix B of 40 CFR 60. The

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

CO₂ reference method for the annual RATA shall be EPA Method 3A Appendix A of 40 CFR 60.

(4) The CO CEMS shall meet Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The CO reference method for the annual RATA shall be EPA Method 10 in Appendix A of 40 CFR 60.

- c. *Data Collection.* Each CEMS and COMS shall continuously record emissions data including episodes of startup, shutdown, and malfunction. Emissions data recorded during periods of startup, shutdown, or malfunction may only be excluded from the compliance averages in accordance with the requirements specified in Condition **A.11.** of this subsection.

Each CEMS shall be designed and operated to sample, analyze, and record emissions data evenly spaced over a 1-hour period. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of the 1-hour block during which the unit combusted fuel. Notwithstanding this requirement, each 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. All valid measurements or data points collected during a 1-hour block shall be used to calculate the 1-hour emission averages. CO, NO_x, and SO₂ CEMS shall express the 1-hour emission averages in terms of "lb/MMBtu of heat input". The CO₂ CEMS shall express the 1-hour emission average (CO₂) in terms of "percent by volume". A 30-day rolling emission average shall be the average of all valid 1-hour emission averages collected during the 30-day period. A 12-month rolling emission average shall be the average of all valid 1-hour emission averages collected during the 12-month period. NO_x and SO₂ CEMS shall comply with NSPS Subpart Da in 40 CFR 60.

Each COMS shall be designed and operated to complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. Opacity shall be recorded in 6-minute block averages.

- d. *Quality Assurance Procedures.* Each CEMS shall comply with the applicable quality assurance procedures specified in Appendix F of 40 CFR 60. These procedures include methods such as calibration, calibration drift, data recording, accuracy assessment, calculations, audit procedures, preventive maintenance, corrective actions, and reporting.
- e. *Monitor Availability.* Monitor availability shall not be less than 95 percent in any calendar quarter. In the event 95 percent availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95 percent availability and a plan of corrective actions that will be taken to achieve 95 percent 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.
- f. *Other Applicable Requirements.* Each CEMS shall comply with the following applicable requirements 40 CFR 60.13 (Subpart A - Monitoring Requirements); 40 CFR 60.48Da (Subpart Da - Compliance Provisions); 60.49Da (Subpart Da - Emissions Monitoring), 60.50Da (Subpart Da - Compliance Provision and Procedures) and 60.51Da (Reporting Requirements).

[Rules 62-4.070 and 62-212.400 (BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]

A.15. Process and Control Parameters. The permittee shall calibrate, maintain, and operate continuous monitoring systems to measure and record the following process and control equipment parameters:

- a. **Power Output.** The net power generation (MW) delivered for sale to the electrical power grid shall be continuously monitored and recorded in 1-hour block averages.
- b. **Fuel Feed Rate.** Fuel flow meters equipped with totalizers are required to monitor and record the fuel feed rates for distillate oil (gallons) and natural gas (million cubic feet). Biomass feed rates (tons of bagasse and tons of wood) shall be calculated and recorded based on actual fuel flows. The permittee shall continuously monitor the fuel throughput rates based on the fuel flow monitors and calculate the actual heat input rates (24-hour average) for each fuel during each day of operation.
- c. **Steam Parameters.** Each cogeneration boiler shall be equipped with monitors to measure and record the steam temperature (° F), steam pressure (psig), and steam production (pounds).
- d. **Urea Injection Rate (SNCR System).** The urea injection rate shall be continuously monitored and recorded for each cogeneration boiler. The urea injection rate shall be compared to actual NO_x

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

emissions data recorded by the CEMS. The permittee shall identify minimum urea injection rates for various load conditions that ensure compliance with the NOX standards. Should the NOX CEMS be unavailable, the urea injection rate shall be maintained at an appropriate minimum level.

- e. ~~Activated Carbon Injection Rate (Mercury Control System). If the mercury injection system is installed, the carbon injection rate shall be continuously monitored and recorded. Based on the testing required in this permit, the permittee shall identify and maintain minimum carbon injection rates to ensure effective control of mercury emissions.~~

The permittee shall maintain written procedures for inspecting, calibrating, and maintaining the process and control monitoring equipment. [Rules 62-4.070 and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) and 0990332-0230-AC (PSD-FL-196QT)]

Test Methods and Procedures

- A.16. Initial Tests Requirements.** If wood is burned for more than 400 hours in any cogeneration boiler, the pertinent emissions unit shall be tested to demonstrate initial compliance with the emissions standards for mercury, PM and VOC while firing wood as specified in Specific Condition **A.22**. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after reintroduction of wood fuel into the unit. The certified CO, NO_x, and SO₂ CEMS and COMS shall be used to demonstrate continuous compliance with the emission limits. The Department may require these initial tests for mercury, PM and VOC to be repeated if major physical or operational changes are made that affect main components such as the boiler, fuels, and/or pollution control equipment. [Rules 62-4.070(3) and 62-297.310(8), F.A.C.; and Permit Nos. 0990332-020-AC (PSD-FL-196Q) & 0990332-025-AC (PSD-FL-196S)]

- A.17. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

EPA Method	Description
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
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.}
12	Inorganic lead emissions
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
26	Determination of Hydrogen Chloride (HCl) Emissions
26A	Method for Determination of Hydrogen Halide and Halogen Emissions
29	Determination of Metals Emissions from Stationary Sources
30B	Determination of Total Vapor Phase Mercury
101A	Determination of Particulate and Gaseous Mercury Emissions From Sewage Sludge Incinerators

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 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A; and, Permit Nos. 0990332-017-AC (PSD-FL-196Q) & 0990332-025-AC (PSD-FL-196S)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

A.18. Compliance Requirements.

- a. CO Emissions. Compliance shall be determined by data collected from the required CO CEMS in terms of “lb/MMBtu of heat input”. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and be consistent with the NO_x monitoring requirements below. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period.
- b. NO_x Emissions. Compliance shall be determined by data collected from the required NO_x CEMS in terms of “lb/MMBtu of heat input”. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and the requirements of 40 CFR 60.13, 60.44a, 60.48a, 60.49a, 60.50a and 60.51a. A boiler-operating day is any day in which any authorized fuel is fired.
- c. SO₂ Emissions. Compliance with the SO₂ standards shall be determined by data collected from the required SO₂ CEMS in terms of “lb/MMBtu of heat input”. The 24-hour average shall be determined by calculating the arithmetic average of all valid hourly emission rates for 24 successive boiler-operating hours. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler-operating days and the requirements of 40 CFR 60.13, 60.43a, 60.48a, 60.49a, 60.50a and 60.51a. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period. Valid SO₂ hourly averages shall not be excluded from any compliance average. *{Permitting Note: Potential emissions of SAM are minimized by the effective control of SO₂ emissions with the firing of low sulfur fuels. For reporting purposes, SAM emissions shall be estimated as 6% of the total measured SO₂ emissions.}*
- d. Visible Emissions. Continuous compliance with the opacity standard shall be determined by data collected from the required COMS in terms of “percent opacity” based on 6-minute block averages. Alternatively, compliance may also be determined by conducting EPA Method 9 observations.
- e. PM Emissions. Compliance with the PM standards shall be determined by the average of three test runs conducted in accordance with EPA Method 5.
- f. VOC Emissions. Compliance with the VOC standards shall be determined by the average of three test runs conducted in accordance with EPA Method 25A based on propane. In addition, the permittee may choose to conduct EPA Method 18 concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. Otherwise, all emissions measured by EPA Method 25A shall be considered “VOC”.
- g. Mercury Emissions. Compliance with the mercury standards shall be determined by the average of three test runs conducted in accordance with EPA Method 101A, 29 or 30B. Emissions in excess of this standard shall be a violation of the permit. ~~In addition, if two or more cogeneration boilers exceed the annual mercury emission limit, the permittee shall install and operate a carbon injection system (or equivalent) for all three units within 30 days of the stack test report due date. The minimum carbon injection rate shall be at least 7 lb/hour. Within 60 days of the stack test report due date, the permittee shall submit to the permitting and compliance authorities a mercury testing protocol designed to establish an effective carbon injection rate to control mercury emissions. Within 60 days of receiving approval for the mercury testing protocol by the permitting authority, the permittee shall begin the approved testing program. At a minimum, the permittee shall submit a full engineering report summarizing the uncontrolled emissions, controlled emissions, fuels, operating capacities, and recommending a minimum activated carbon injection rate to control mercury emissions.~~
- h. Hydrogen Chloride Emissions. Compliance with the HCl standard shall be demonstrated through performance testing and determined by the average of three test runs conducted in accordance with EPA Method 26 or 26A. *{Permitting Note: The permittee is required to conduct fuel analysis per 40 CFR 63.7521 to establish maximum fuel pollutant input levels. The maximum chlorine fuel input can be established by using an alternative calculation method as described in Appendix AMP, Alternative Monitoring Procedure for Demonstrating Compliance with the boiler MACT HCl Emissions Limit (ASP 17-C-AP issued by FDEP on 02/24/2017).}*

[Rules 62-4.070(3), 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.; 40 CFR 63.7500 and Table 2; and,

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

Permit Nos. 0990332-020-AC (PSD-FL-196Q), & 0990332-025-AC (PSD-FL-196S), & 0990332-030-AC (PSD-FL-196T)]

- A.19. Common Testing Requirements.** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. 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, read the instructions on each screen (and under the Help tabs) to complete the notification.}

- A.20. Annual Compliance Tests Required.** Except as provided in Appendix TR, during each calendar year (January 1st to December 31st), each boiler shall be tested to demonstrate compliance with the emissions standards for mercury, particulate matter and VOC. [Rule 62-297.310(8)(a), F.A.C.; and Permit No. 0990332-020-AC (PSD-FL-196Q)]

- A.21. Compliance Tests Prior To Renewal.** Except as provided in Appendix TR, compliance tests shall be performed for each boiler for mercury, particulate matter 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 **A.8.d. - A.8.f** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]

- A.22. Additional Testing Requirements.** Emissions testing shall be conducted with each cogeneration boiler operating at permitted capacity, which is defined as a heat input rate between 684 and 760 MMBtu/hour and firing a minimum of 85% biomass (bagasse only) when wood is not being used and 100% biomass (bagasse and wood) when wood is reintroduced as a fuel. If it is impracticable to test at permitted capacity, a cogeneration boiler may be tested at less than the maximum permitted capacity; in this case, subsequent operation is limited to 110% of the test rate until a new test is conducted. Within three days of completing a test below permitted capacity, the permittee shall provide written notification of the restricted operational capacity to the Compliance Authority. Once the unit is so limited, another emissions test shall be conducted and completed at a higher operating rate no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. [Rules 62-4.070 and 62-297.310(3), F.A.C.; 40 CFR 60.7 and 60.8; and, Permit No. 0990332-025-AC (PSD-FL-196S)]

- A.23. NESHAP Tune-Up Requirements.** The permittee must conduct an annual tune-up of each cogeneration boiler to demonstrate continuous compliance with 40 CFR 63, Subpart DDDDD requirements as specified in paragraphs

- 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). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. 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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

- 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 Department, a report containing the information in the following paragraphs:
- (1) 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;
 - (2) A description of any corrective actions taken as a part of the tune-up; and
 - (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[Rule 62-204.800(11)(b)86, F.A.C.; and 40 CFR 63.7540(a)(10)]

Recordkeeping and Reporting Requirements

A.24. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

<u>Report</u>	<u>Reporting Deadline</u>	<u>Related Condition(s)</u>
<u>NESHAP Performance Test Reports</u>	<u>60 days after performance test completion</u>	<u>A.25</u>
<u>NESHAP Semiannual Reports</u>	<u>60th day following each calendar half</u>	<u>A.26, FW9</u>
<u>NSPS Reporting Requirements</u>	<u>60th day following each calendar half</u>	<u>A.27</u>

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

A.25. NESHAP Performance Test Reports. The permittee must report the results of performance tests required by 40 CFR 63, Subpart DDDDD within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each cogeneration boiler have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 to Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550 (see Specific Condition A.26). [Rule 62-204.800(11)(b)86, F.A.C.; and 40 CFR 63.7515(f)]

A.26. NESHAP Semiannual Reports. The permittee must submit reports semiannually in Table 9 to 40 CFR 63, Subpart DDDDD as applicable by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). [Rule 62-204.800(11)(b)86, F.A.C.; and 40 CFR 63.7550(a) & (b)(5)]

A.27. NSPS Reporting Requirements.

- a. *Performance Data.* For SO₂, PM, and NO_x, the performance test data, and data from the performance evaluation of the continuous monitors (including the transmissometer) must be reported to the Department.
- b. *SO₂ and NO_x 24-Hour Averaging Period Information Reporting.* For SO₂ and NO_x the following information is reported to the Department for each 24-hour period.
 - (1) Calendar date.
 - (2) The average SO₂ and NO_x emission rates (ng/J, lb/MMBtu, or lb/MW-hour) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and description of corrective actions taken.
 - (3) The permittee complying with the percent reduction requirement, percent reduction of the potential combustion concentration of SO₂ for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and description of corrective actions taken.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

- (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75% of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
 - (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, or malfunction.
 - (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (7) Identification of times when hourly averages have been obtained based on manual sampling methods.
 - (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
 - (9) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
- c. *Emissions Data Not Available.* For any periods for which opacity, SO₂ or NO_x emissions data are not available, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
- d. *Signed Statement.* The permittee shall submit a signed statement indicating whether:
- (1) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
 - (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
 - (3) The minimum data requirements have or have not been met; or the minimum data requirements have not been met for errors that were unavoidable.
 - (4) Compliance with the standards has or has not been achieved during the reporting period.
 - (5) *Quarterly Opacity Excess Emissions Reports.* For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Department each calendar quarter.
- e. *Semi-Annual Reports.* The permittee shall submit the written reports, including Subpart A reports, to the Department semiannually for each six-month period. All semiannual reports shall be postmarked by the 60th day following the end of each six-month period.
- f. *Quarterly Electronic Report.* The permittee may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity in lieu of submitting the written reports required by paragraph A.27.b and A.27.d(5). The format of each quarterly electronic report shall be coordinated with the Department. The electronic reports shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period.
- [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.19(d) & 60.51Da(a)-(d), (f)-(k)]

A.28. Power Generation. In conjunction with AOR, the permittee shall report the annual power generation (MWe-hours per year) for the previous calendar year and the 3-year average for the previous three calendar years. The report shall identify whether the cogeneration plant remains a "Qualifying Cogeneration Facility" as specified in 40 CFR Part 72 and is exempt from Acid Rain permitting. [40 CFR 72; Rule 62-4.070(3), F.A.C.]

A.29. Fuel Records. The permittee shall maintain a daily log of the amounts and types of fuels used. The amount, heating value, and sulfur content of each fuel oil delivery shall be kept in a log for at least five years. For each calendar month, the actual monthly SO₂ emissions and the 12-month rolling total SO₂ emissions shall be determined and kept in a log. In addition, the permittee shall abide by the Ash and Fuel Management Plans specified in Appendices AM and FM. [Rules 62-4.070 and 62-212.400 (BACT), F.A.C.; and, Permit

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001-003, Cogeneration Boilers A, B, and C

No. 0990332-020-AC (PSD-FL-196Q)]

A.30. CEMS and COMS Quarterly Reports. For each cogeneration boiler, the permittee shall submit a quarterly report for each required CEMS and COMS in accordance with the requirements specified in Appendix QR of this permit. In addition to the information identified in this report, the permittee shall also submit a quarterly summary of the fuel analyses, fuel usage, and equipment malfunctions. For each malfunction, the report shall identify the cause (if known), and corrective actions taken. The authorized representative shall certify that the information provided in each quarterly report is true, accurate, and complete to the best of his/her knowledge. The quarterly reports and summaries shall be submitted to the Compliance Authority no later than 30 days following each calendar quarter. [Rules 62-4.070 and 62-212.400 (BACT), F.A.C.; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]

A.31. Excess Emissions Reporting.

- a. *Malfunction Notification.* In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunction shall be submitted in a quarterly report, if requested by the Department.
- b. *Annual Report.* In conjunction with AOR, the permittee shall report the number of startups, shutdowns, and malfunctions that occurred during the year for each boiler. For each CO and NO_x CEMS, the report shall identify the annual hours of emissions data excluded from the compliance determination due to each type of incident.

[Rules 62-4.070(3), 62-210.700, F.A.C.; and Permit No. 0990332-020-AC (PSD-FL-196Q)]

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.]

Other Applicable Requirements

A.33. NSPS 40 CFR 60, Subparts A and Da Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 60, Subpart Subpart A (General Provisions) and Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978), attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart Da, respectively. [Rule 62-213.440, F.A.C.; and, 40 CFR 60, Subparts A & Da]

{Permitting Note: These boilers are not subject to 40 CFR 60, Subpart Ea, however, must comply with the exemption requirements of 40 CFR 60.50a(d) as specified in Conditions A.3.a. & A.29. of this permit.}

A.34. NESHAP 40 CFR 63, Subparts A and DDDDD Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 63, Subpart A (General Provisions) and Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters), attached to this permit as Appendix NESHAP, Subpart A and Appendix NESHAP, Subpart DDDDD, respectively. [Rule 62-213.440, F.A.C.; 40 CFR 63, Subparts A & DDDDD; and, Permit No. 0990332-020-AC (PSD-FL-196Q)]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 004, Cogeneration Plant – Material Handling and Storage Operations

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

EU No.	Brief Description
004	Cogeneration Plant – Material Handling and Storage includes unloading operations, stockpiles, transfer operations, conveyors, screens, crushers, <u>and</u> hoppers <u>and silos</u> .

The materials handling and storage operations include authorization for truck and railcar unloading operations, storage piles, transfer operations, conveyors, screens, crushers, and hoppers and silos. The materials authorized to be handled and stored include bagasse, authorized wood, fly ash, and bottom ash, and a mercury removal agent (e.g., activated carbon). Unconfined particulate matter emissions from the operations shall be controlled by the use of the BACT controls and reasonable precautions specified in the following conditions.

Essential PTE Parameters

B.1. Methods of Operation. The authorized methods of operation include the following:

- a. *Biomass Handling and Storage Operations:* The permittee is authorized to handle and store biomass fuels. The following activities are associated with these operations: truck unloading (dumps #1, #2 and #3, unloading bay); chain conveyors (#1 and #2); unloading conveyor; disk screen; hogger; storage conveyor; radial stacker; biomass storage pile (active and inactive); underpile chain reclaimers (#1 and #2); boiler feed conveyor; boiler feed conveyor hopper; sugar mill bagasse feed conveyor; sugar mill bagasse conveyor hopper; chain distribution conveyors (#1 and #2); boiler meter bins; recycle conveyor; and the fixed recycle stacker.
- b. *Fly Ash Handling and Storage Operations:* The permittee is authorized to handle and store fly ash. The following activities are associated with these operations: boiler bank hoppers; air preheater hoppers; electrostatic precipitator hoppers; enclosed drag chain conveyors; fly ash storage silo (1,500 tons); fly ash pug mill conditioners; fly ash truck load-out; mechanical dust collector hoppers; mixed (bottom and fly) ash conveyor belt; and mixed ash bunker. {Permitting Note: The fly ash silo, fly ash pug mill conditioners and fly ash truck load-out have not operated for several years and the plant currently sends fly ash to the mixed ash conveyor belt and then to the mixed ash bunker.}
- c. *Activated Carbon Handling and Storage Operations:* In the event that an Activated Carbon Injection system (ACI) is required to meet the permitted mercury emission limit, the mercury control system reactant storage silo(s) shall be maintained at a negative pressure while operating with the exhaust vented to a filter control system. Visible emissions from any storage silo shall not exceed 5 percent opacity based on a 6 minute block average. A visible emissions test (EPA Method 9) shall be performed at least annually for each silo that is loaded with carbon during the calendar year. {Permitting Notes: If two or more cogeneration boilers exceed the annual mercury emission limit, the carbon injection system will be installed for all three boilers within 30 days of the stack test report due date.}
- d. *Bottom Ash Handling and Storage Operations:* The permittee is authorized to handle and store bottom ash. The following activities are associated with these operations: submerged and enclosed drag chain conveyors; transfer conveyor; collection conveyor; three-walled storage bunker; and bottom ash truck load-out.

[Rules 62-4.160(2), 62-210.200 (Definitions), and 62-210.300, F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 020-AC (PSD-FL-196Q)]

B.2. Hours of Operation. This emissions unit may operate continuously (i.e., 8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.]

Control Technology

B.3. Baghouses. The fly ash storage silo shall be controlled by a baghouse and the activated carbon silo(s) shall be controlled by a baghouse(s) (if required by Specific Condition B.1.c). Each baghouse shall be designed, operated and maintained to achieve an outlet dust loading of no greater than 0.01 grains per actual cubic feet of exhaust. New and replacement bags shall meet this equipment specification based on vendor

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 004, Cogeneration Plant – Material Handling and Storage Operations

design information. No particulate matter emissions tests are required. *[Permitting Note: The fly ash silo and fly ash silo baghouse have not been operated for several years and the plant currently sends fly ash to the mixed ash conveyor belt and then to the mixed ash bunker. In addition, activated carbon silos have not been used for several years since the mercury limit can be met without the injection of activated carbon.]* [Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]

- B.4. Ash and Fuel Management Plans.** The permittee shall abide by the Ash and Fuel Management Plans specified in Appendix AM and FM, respectively. [Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]
- B.5. Control Equipment O&M Plan.** The permittee shall abide by the operation and maintenance (O&M) plans for the cogeneration plant control equipment specified in Appendix OM of this permit. [Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]

Emission Limitations and Standards

- B.6. Baghouse Vents.** As determined by EPA Method 9, visible emissions from each baghouse vent shall not exceed 5 percent opacity. [Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]

- B.7. Fugitive Dust from Material Handling.** The following conditions apply to the biomass and ash handling facilities.

Except for those associated with the stacker/reclaimer, all conveyors and conveyor transfer points shall be enclosed to prevent fugitive particulate matter emissions.

Water sprays, chemical wetting agents, and/or stabilizers shall be applied to storage piles, handling equipment, unenclosed transfer points, etc. during dry periods and as necessary to prevent visible emissions. When adding, moving or removing material from the storage pile, visible emissions shall not exceed 20 percent opacity.

The fly ash handling system including all transfer points and the storage bin shall be enclosed. Bottom ash and fly ash shall be wetted and transferred in enclosed conveyors to the enclosed ash storage building. Alternatively, the ash shall be wetted and discharged to the ash storage silo.

The distance that biomass fuel is dropped during handling shall be minimized.

Windbreaks around the material handling equipment shall be used as necessary.

Maintenance of paved areas as needed.

[Rules 62-4.070(3), 62-296.320(4)(c), and 62-212.400 (BACT), F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]

Test Methods and Procedures

- B.8. Baghouse Vents.** At least once during each calendar year (January 1st to December 31st), the permittee shall test each silo baghouse vent in accordance with EPA Method 9. Due to infrequent use, the baghouse vent for the fly ash storage silo shall be tested during any calendar year in which the fly ash storage silo operates more than 400 hours, and if the activated carbon injection system are installed and operate, the baghouse vent for the activated carbon silos shall be tested during any calendar year in which the activated carbon injection system operates more than 400 hours. The baghouse vent for the activated carbon silos shall be tested during a delivery of activated carbon. Tests shall be conducted in accordance with the applicable requirements in Appendix TR, Facility Wide Testing Requirements, of this permit. The minimum observation period for an opacity test shall be 30 minutes. [Rules 62-4.070(3), 62-212.400 (BACT), and 62-297.310, F.A.C.; and, Permit Nos. 0990332-017-AC (PSD-FL-196P) & 0990332-020-AC (PSD-FL-196Q)]

Recordkeeping and Reporting Requirements

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 004, Cogeneration Plant – Material Handling and Storage Operations

B.9. ~~Test Reports.~~ ~~For each visible emissions test conducted, the permittee shall file a test report with the Department as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Each test report shall include the information specified in Rule 62-297.310(10), F.A.C. as summarized in Appendix TR of this permit. [Rules 62-297.310(10), F.A.C.]~~

B.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007, Cogeneration Plant – Emergency Fire Pumps

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

EU No.	Brief Description
007	Cogeneration Plant – Emergency Diesel-Fired Fire Pumps

This emissions unit consists of two (2) stationary compression ignition (CI) diesel fuel-fired reciprocating internal combustion engines (RICE) used to drive emergency fire pumps.

The following table provides important details for these units:

EU Description	Duty	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Fire Pump #1 (located by warehouse)	Emergency	310 (231 kW)	Prior to 2005	Prior to 2005	1.16	Detroit	DDFP-L6VT-2362
Fire Pump #2 (fire water tank south of Ash Bunker)	Emergency	375 (280 kW)	Prior to 2005	Prior to 2005	1.3	Caterpillar	3208

{Permitting Note: These CI 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 engines are exempted from regulations under 40 CFR 60, Subpart IIII, New Source Performance for Stationary Internal Combustion Engines, based on the manufacturer date. This is an “existing” stationary emergency CI RICE less than or equal to 500 HP, with a displacement of less than 10 liters per cylinder that is located at a major source of HAP and that has not been modified or reconstructed after 6/12/2006.}

Essential PTE Parameters

C.1. Hours of Operation. In order for these RICE to be considered emergency RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs C.1.a through C.1.c, is prohibited. If these RICE are not operated according to the requirements of paragraphs C.1.a through C.1.c, the RICE will not be considered emergency RICE under Subpart ZZZZ and must meet all requirements for non-emergency RICE.

- Emergency Situations.** There is no time limit on the use of these fire pump engines in emergency situations. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(1)]
- Maintenance and Readiness Testing.** These engines are 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. Operation for maintenance checks and readiness testing is limited to 100 hours per year. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(2)(i)]
- Non-emergency Situations.** This engine is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(3)]
- Engine Startup.** During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(h)]

Emissions Limitations and Operating Requirements

C.2. Work or Management Practice Standards.

- Oil.** Change oil and filter every 500 hours of operation or annually, whichever comes first or use an oil analysis program to extend this interval (see Specific Condition C.2.e. below). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, Table 2(c)(1) and footnote 2]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007, Cogeneration Plant – Emergency Fire Pumps

- b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, Table 2c(1)(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 the permittee's 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(e)]
- e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph C.2.a. 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 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 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(i)]

Monitoring of Operations

- C.3. *Hour Meter*. The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(f)]

Compliance Requirements

- C.4. *Continuous Compliance*. Each unit shall be in compliance with the operating standards in this section at all times. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6605(a)]
- C.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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6605(b)]

Recordkeeping and Reporting Requirements

- C.6. *Hours of Operation Records*. The owner or operator must keep records of the hours of operation of the engines that is recorded through the non-resettable hour meter. The records 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(f)]
- C.7. *Compliance Records*. The owner or operator must keep records to show continuous compliance with each emission limitation or operating requirement in Specific Condition C.2.d. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(d)]
- C.8. *Malfunction Records*.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007, Cogeneration Plant – Emergency Fire Pumps

- a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
- b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(a)(2) & (5)]

C.9. Maintenance Records.

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(a)(4) & (e) & Table 6]

C.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.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

- C.11. Emergency Situations. 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 C.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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

General Provisions

- C.12. 40 CFR 63 Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 63 Subpart A, General Provisions, as specified below:

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(b)(1)-(4)	Compliance Dates for new and reconstructed sources
§63.6(b)(5)	Notification
§63.6(c)(1)-(2)	Compliance dates for existing sources
§63.6(f)(2)	Methods of determining compliance
§63.6(f)(3)	Finding of compliance
§63.6(g)(1)-(3)	Use of alternate standards
§63.6(i)	Compliance extension procedures and criteria
§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)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007, Cogeneration Plant – Emergency Fire Pumps

General Provisions Citation	Subject of Citation
§ 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(d)(4)	Progress Reports
§ 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 63.6665]

[TABLE OF CONTENTS](#)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Units 008 and 009, Cogeneration Plant – Emergency CI Pumps

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

EU No.	Emissions Unit Description
008	NHPC Fire Water Makeup
009	Air Compressor #2

These emissions units are stationary compression ignition (CI) diesel fuel-fired reciprocating internal combustion engines (RICE) used to drive emergency generators.

The following table provides important details for these units:

EU Description	Duty	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
EU 008 NHPC Fire Water Makeup	Emergency	173 (129 kW)	2019	2010	0.75	Case	P-170
EU 009 Air Compressor #2	Emergency	540 (403 kW)	2011	2011	2.53	Caterpillar	C15

{Permitting Note: These This CI RICE are is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. These This RICE are is are not a fire pumps. They are This RICE is a “new” stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP, that commenced construction on or after 6/12/2006, and that has a post-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}

Essential PTE Parameters

- D.1. Authorized Fuel.** These 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 or 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.
 - c. *Use of Existing Fuel.* Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4207(b), 80.510(b) & 1039.305]
- D.2. Restricted Hours of Operation.** In order for these RICE to be considered emergency RICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs D.2.a through D.2.c, is prohibited. If these RICE are not operated according to the requirements of paragraphs D.2.a through D.2.c, the RICE will not be considered emergency RICE under Subpart IIII and must meet all requirements for non-emergency RICE.
- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(1)]
 - b. *Maintenance and Testing.* These engines are 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. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(2)(i)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Units 008 and 009, Cogeneration Plant – Emergency CI Pumps

- e. *Non-emergency Situations.* These engines may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(3)]

D.3. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. These RICE must be maintained and operated to meet the emissions limits in Specific Conditions **D.4. – D.6.** over the entire life of the engine. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4206, 4211(a)(1), (2) & (3)]

Emissions Limitations and Standards

D.4. NO_x + NMHC Emissions. Emissions of NO_x plus non-methane hydrocarbons (NMHC) from each engine shall not exceed 4.0 grams per kilowatt hour (g/kW-hr). [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]

D.5. Carbon Monoxide. Emissions of CO shall not exceed the following standards:

a. ~~from EU 008:~~ 5.0 g/kW-hr.

b. ~~from EU 009:~~ 3.5 g/kW-hr.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112 1039, Appendix I, Table 3]

D.6. Particulate Matter. Emissions of PM shall not exceed the following standards:

a. ~~from EU 008:~~ 0.30 g/kW-hr.

b. ~~from EU 009:~~ 0.20 g/kW-hr.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112 1039, Appendix I, Table 3]

Testing and Compliance Requirements

D.7. 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 **D.8.** [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(c)]

D.8. Compliance Requirements Due to Loss of Certification. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee 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, the permittee 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 the permittee changes emission-related settings in a way that is not permitted by the manufacturer. For EU No. 009, the permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(g)(2) & (3)]

D.9. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **D.8.**, 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 1042, Subpart F. 40 CFR Part 1039, Subpart F. Alternatively, these RICE may follow the testing procedures in 40 CFR 60.4213, as appropriate.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Units 008 and 009, Cogeneration Plant – Emergency CI Pumps

- b. *NTE Standards.* Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in Specific Conditions **D.4 - D.6.**, determined from the following equation:

$$\text{NTE Requirement for Each Pollutant} = (1.25) \times (\text{STD}) \text{ (Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 1039.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4212(a) & (c)]

- D.10. Common Testing Requirements.** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Unless otherwise specified and if required, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldcpportal.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, read the instructions on each screen (and under the Help tabs) to complete the notification.}

Monitoring of Operations

- D.11. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4209(a)]

Recordkeeping and Reporting Requirements

- D.12. Hours of Operation Records.** The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4214(b)]

- D.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 Condition **D.8.**, the owner or operator must keep the following records:
- Engine manufacturer documentation and certification indicating compliance with the standards.
 - A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
 - A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.
- [Rule 62-213.440(1), F.A.C.]

- D.14. Testing Notification.** At such time that the requirements of Specific Condition **D.8.** 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.]

- D.15. 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

- D.16. 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.

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Units 008 and 009, Cogeneration Plant – Emergency CI Pumps

General Provisions Citation	Subject of Citation
§ 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

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4218 & Table 8 to 40 CFR 60, Subpart IIII]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

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

<u>EU No.</u>	<u>Brief Description</u>
<u>010</u>	<u>Cogeneration Plant – Sugar Mill Refinery Package Boiler</u>

This emissions unit is a Cleaver Brooks Model NB-081D-125-550-AL-LH natural gas-fired package boiler. This unit has a maximum design capacity of 337.7 million British thermal units per hour (MMBtu/hr) and can produce a maximum of 250,000 pounds per hour (lb/hr) of steam at 550 pounds per square inch, gauge (psig) and 650 degrees Fahrenheit (°F). This boiler is equipped with low-NO_x burners (LNB), flue gas recirculation (FGR), and selective catalytic reduction (SCR). SCR shall be used as needed to comply with NO_x emissions limits. Exhaust from this boiler exits a stack with a height of 125 feet (ft) and an exit diameter of 5.5 ft at a flow rate of 95,612 actual cubic feet per minute (acfm) and a temperature of 295°F.

[Permitting Note: This emissions unit is regulated under: Rules 62-296.570, F.A.C. – Reasonably Available Control Technology (RACT) – Requirements for Major VOC- and NO_x-Emitting Facilities and 62-296.702, F.A.C. – Fossil Fuel Steam Generations; 40 CFR 60, Subpart A – General Provisions and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rules 62-204.800(8)(c), F.A.C. and (8)(b), F.A.C., respectively; and 40 CFR 63, Subpart A – General Provisions and Subpart DDDDD – NESHAP: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rules 62-204.800(11)(d), F.A.C. and (11)(b), F.A.C., respectively.]

EQUIPMENT

E.1. Sugar Mill and Refinery Package Boiler. The permittee is authorized to operate a Cleaver Brooks Model NB-081D-125-550-AL-LH (or equivalent) with a maximum design capacity of 337.7 MMBtu/hr to supply steam to the Okeelanta Sugar Mill and Refinery (Facility ID No. 0990005). [Application No. 0990332-026-AC]

PERFORMANCE RESTRICTIONS

E.2. Design Capacity. The maximum design capacity of this EU is limited to 337.7 MMBtu/hr. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0990332-026-AC]

E.3. Authorized Fuel. This EU is authorized to only fire natural gas. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0990332-026-AC]

E.4. Restricted Operation. While EU No. 001 (Cogeneration Boiler A), EU No. 002 (Cogeneration Boiler B), and/or EU No. 003 (Cogeneration Boiler C) are not operating, hours of operation for this EU are not limited (8,760 hours/year). This EU may only operate for a maximum of 1,485 hours/year while EU Nos. 001, 002, and 003 are operating. [Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Permit No. 0990332-026-AC]

E.5. NO_x Control Technology. The permittee shall install, operate, and maintain low NO_x burners (LNB), a flue gas recirculation (FGR) system, and a selective catalytic reduction (SCR) system to control NO_x emissions. The SCR shall be operated and maintained as needed to comply with the NO_x emission standard in Specific Condition **E.6.** [Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Application No. 0990332-026-AC]

EMISSIONS STANDARDS

E.6. NO_x Emissions. As determined by a NO_x continuous emissions monitoring system (CEMS) installed, operated, and maintained in accordance with 40 CFR 60, Subpart Db, this boiler shall meet a NO_x emissions limit of 0.1435 pounds per million British thermal units (lb/MMBtu) of heat input, based on a 30-day rolling average. This emission limit applies at all times including periods of startup, shutdown, and malfunction. [Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Permit No. 0990332-026-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

{Permitting Note: This emissions limit is based on a NO_x concentration of 120 parts per million by volume, dry (ppmvd) at 3% oxygen (O₂).}

E.7. NSPS NO_x Emissions. The permittee shall not cause to be discharged into the atmosphere from this EU any gases that contain NO_x (expressed as NO₂) in excess of 86 nanograms per Joule (ng/J) or 0.20 lb/MMBtu. Compliance with this emissions limit is determined on a 30-day rolling average basis. This emission limit applies at all times including periods of startup, shutdown, and malfunction. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.44b(a), (h), (i), & (l)(1)]

E.8. RACT NO_x Emissions. Emissions of NO_x from this EU shall not exceed 0.50 lb/MMBtu. [Rule 62-296.570(3)(b)9., F.A.C.]

WORK PRACTICE STANDARDS

E.9. NESHAP Annual Tune-Up Requirements. The permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in paragraphs **E.9.a** through **E.9.f**.

- 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);
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX 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 Department, a report containing the information in paragraphs **E.9.f(1)** through **E.9.f(3)**:
 - (1) 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;
 - (2) A description of any corrective actions taken as a part of the tune-up; and
 - (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.7500(a)(1), 63.7540(a)(10), & Table 3 to 40 CFR 63, Subpart DDDDD]

TESTING REQUIREMENTS

E.10. Test Requirements. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix TR (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.

E.11. Test Methods. Required tests shall be performed in accordance with the following reference methods.

<u>Method</u>	<u>Description of Method and Comments</u>
<u>1-4</u>	<u>Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content</u>
<u>7E</u>	<u>Determination of Nitrogen Oxide Emissions from Stationary Sources</u>
<u>19</u>	<u>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.)</u>

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

MONITORING REQUIREMENTS

E.12. NSPS NO_x CEMS Requirements. The permittee shall comply with either of the following paragraphs:

- Install, calibrate, maintain, and operate CEMS for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system; or**
- If the permittee has installed a NO_x emission rate CEMS to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, that CEMS may be used to meet the requirements of this section, except that the permittee shall also meet the requirements of 40 CFR 60.49b. Data reported to meet the requirements of 40 CFR 60.49b shall not include data substituted using the missing data procedures in 40 CFR 75, Subpart D, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.**

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.48b(b)]

E.13. NSPS NO_x CEMS Data Recording. The CEMS required under Specific Condition **E.12** shall be operated and data recorded during all periods of operation of this EU except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.48b(c)]

E.14. NSPS NO_x CEMS Emissions Averaging. The 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by Specific Condition **E.12** and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under Specific Condition **E.7**. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2). [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.48b(d)]

E.15. NSPS NO_x CEMS Span Requirements. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

- The span value for NO_x is determined using one of the following procedures:**
 - Except as provided under paragraph E.15.a(2), the NO_x span value for natural gas shall be 500 parts per million (ppm).**
 - As an alternative to meeting the requirements of paragraph E.15.a(1) the permittee may elect to use NO_x span values determined according to 40 CFR 75, Appendix A, Section 2.1.2.**
- Span values computed under paragraph E.15.a(2) shall be rounded off according to 40 CFR 75, Appendix A, Section 2.1.2.**

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.48b(e)(2) & (3)]

E.16. NSPS NO_x CEMS Data Availability. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of 40 CFR 60, Appendix A, Method 7A of 40 CFR 60.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

Appendix A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.48b(f)]

RECORDS AND REPORTS

- E.17. NSPS Excess Emissions Reports.** The permittee is required to submit excess emission reports for any excess emissions that occurred during the reporting period. The permittee shall submit reports containing the information recorded under Specific Condition E.21. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.49b(h)(2) & (i)]
- E.18. NESHAP Annual Compliance Reporting Requirements.** The permittee must submit an annual compliance report within 60 days after the end of each calendar year. The compliance report must contain the following information:
- Company and Facility name and address.
 - Process unit information, emissions limitations, and operating parameter limitations.
 - Date of report and beginning and ending dates of the reporting period.
 - Include the date of the most recent tune-up for this EU. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- [Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.7550(b)(5), (c)(1), & (c)(5)(i)-(iii), (c)(5)(xiv), & (c)(5)(xvii)]
- E.19. Test Reports.** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the heat input rate. [Rules 62-4.070(3) & 62-297.310(10), F.A.C.; and Permit No. 0990332-026-AC]
- E.20. NSPS NO_x Fuel Records.** The permittee shall record and maintain records of the amounts of natural gas combusted during each day and calculate the annual capacity factor individually for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.49b(d)(1)]
- E.21. NSPS NO_x Emissions Records.** The permittee shall maintain records of the following information for each steam generating unit operating day:
- Calendar date;
 - The average hourly NO_x emission rates (expressed as NO_x) (ng/J or lb/MMBtu heat input) measured or predicted;
 - The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under Specific Condition E.7, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
 - Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

- j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.49b(g)]

E.22. NESHAP Recordkeeping Requirements. The permittee must keep 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, according to the requirements in 40 CFR 63.10(b)(2)(xiv). The permittee must keep records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). Each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept 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.; 40 CFR 63.7555(a)(1) & 63.7560]

E.23. NESHAP General Provisions. The following parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to the permittee:

<u>Citation</u>	<u>Subject</u>
<u>§ 63.1</u>	<u>Applicability</u>
<u>§ 63.2</u>	<u>Definitions</u>
<u>§ 63.3</u>	<u>Units and Abbreviations</u>
<u>§ 63.4</u>	<u>Prohibited Activities and Circumvention</u>
<u>§ 63.5</u>	<u>Preconstruction Review and Notification Requirements</u>
<u>§ 63.6(a), (b)(1)–(b)(5), (b)(7), (c)</u>	<u>Compliance with Standards and Maintenance Requirements</u>
<u>§ 63.6(f)(2) and (3)</u>	<u>Compliance with non-opacity emission standards.</u>
<u>§ 63.6(g)</u>	<u>Use of alternative standards</u>
<u>§ 63.6(i)</u>	<u>Extension of compliance</u>
<u>§ 63.6(j)</u>	<u>Presidential exemption.</u>
<u>§ 63.7(a), (b), (c), and (d)</u>	<u>Performance Testing Requirements</u>
<u>§ 63.7(e)(2)–(e)(9), (f), (g), and (h)</u>	<u>Performance Testing Requirements</u>
<u>§ 63.8(a) and (b)</u>	<u>Applicability and Conduct of Monitoring</u>
<u>§ 63.8(c)(1)</u>	<u>Operation and maintenance of CMS</u>
<u>§ 63.8(c)(1)(ii)</u>	<u>Operation and maintenance of CMS</u>
<u>§ 63.8(c)(2) to (c)(9)</u>	<u>Operation and maintenance of CMS</u>
<u>§ 63.8(d)(1) and (2)</u>	<u>Monitoring Requirements, Quality Control Program</u>
<u>§ 63.8(d)(3)</u>	<u>Written procedures for CMS</u>
<u>§ 63.8(e)</u>	<u>Performance evaluation of a CMS</u>
<u>§ 63.8(f)</u>	<u>Use of an alternative monitoring method.</u>
<u>§ 63.8(g)</u>	<u>Reduction of monitoring data</u>
<u>§ 63.9</u>	<u>Notification Requirements</u>
<u>§ 63.10(a), (b)(1)</u>	<u>Recordkeeping and Reporting Requirements</u>
<u>§ 63.10(b)(2)(i)</u>	<u>Recordkeeping of occurrence and duration of startups or shutdowns</u>
<u>§ 63.10(b)(2)(iii)</u>	<u>Maintenance records</u>
<u>§ 63.10(b)(2)(vi)</u>	<u>Recordkeeping for CMS malfunctions</u>
<u>§ 63.10(b)(2)(vii) to (xiv)</u>	<u>Other CMS requirements</u>
<u>§ 63.10(c)(1) to (9)</u>	<u>Recordkeeping for sources with CMS</u>
<u>§ 63.10(c)(12) and (13)</u>	<u>Recordkeeping for sources with CMS</u>
<u>§ 63.10(c)(15)</u>	<u>Use of startup, shutdown, and malfunction plan</u>

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Units 010, Cogeneration Plant – Sugar Mill Refinery Package Boiler

<u>§ 63.10(d)(1) and (2)</u>	<u>General reporting requirements</u>
<u>§ 63.10(d)(4)</u>	<u>Progress reports under an extension of compliance</u>
<u>§ 63.10(e)</u>	<u>Additional reporting requirements for sources with CMS</u>
<u>§ 63.10(f)</u>	<u>Waiver of recordkeeping or reporting requirements</u>
<u>§ 63.12</u>	<u>State Authority and Delegation</u>
<u>§ 63.13–63.16</u>	<u>Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions</u>
<u>[40 CFR 63.7565]</u>	

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

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

EU No.	Emissions Unit Description
021	Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1
022	Central Dust Collection System No. 2 (System “B”)/Wet Rotoclone No. 2
023	Cooler No. 1 with Rotoclone No. 3
024	Cooler No. 2 with Rotoclone No. 4
025	Fluidized Bed Dryer/Cooler with Baghouse
034	Bulk Load-Out Operation w/ Baghouse
035	Transfer Bulk Load-out Operation
043	Sugar Refinery Alcohol Usage
054	Dust Collection System “A”/Wet Rotoclone No. 6
055	Dust Collection System “C”/Wet Rotoclone No. 7
059	Dust Collection System (Baghouse) – (Emissions control for Pkg. Lines 17, 18,19 and bulk bag line)

The sugar refinery consists of several miscellaneous emissions units that handle, process, store, and transfer a variety of sugar products. The primary sugar drying system is a Fluidized Bed Dryer/Cooler (EU 025) with a design equipment capacity of approximately 1350 tons per day(TPD). Steam is used for the necessary heat and no fuels are fired in the dryer. The exhaust is controlled by a high efficiency baghouse manufactured by BETH GmbH, 23556 LÜB-beck. The baghouse exhausts through a stack 93 feet above grade.

A Rotary Dryer (EU 021) is used for specialty sugars and when the fluidized bed dryer is off line for repairs. Steam is used for the necessary heat and no fuels are fired in the dryer. Dust emissions from the rotary dryer are controlled with the use of a skimmer followed by wet Rotoclone No. 1, which exhausts 89 feet above grade. Sugar from the rotary dryer Raw sugar from the centrifugals or wet bins is directed to two coolers (EU 023 and EU 024), each with a design capacity of 1350 TPD. The exhaust from Cooler No. 1 is controlled by Rotoclone No. 3 vented 80 feet above grade. The exhaust from Cooler No. 2 is controlled by Rotoclone No. 4 vented 80 feet above grade. The 32-stage high-production mode (rotary dryer followed by two coolers operating in series) is needed when producing approximately 1000 TPD of refined white sugar and 600 TPD of specialty sugars. When operating the rotary system in the low-production mode (< 1000 TPD of white sugar or < 6500 TPD of specialty sugar), Cooler No. 1 (EU 023) functions as a dryer followed in series by Cooler No. 2 (EU 024) and the rotary dryer remains shutdown. The Rotary System may operate simultaneously with the Fluidized Bed Dryer/Cooler.

Dust collection Systems “A”, “B” and “C” (EUs 054, 022 & 055, respectively) are used to control dust emissions from several miscellaneous sources:

System “A”, Rotoclone No. 6 (EU 054) controls fourteen drop points at the Fluidized Bed System and fourteen drop points at the Rotary Dryer System. The drop points include the following:

- Belt Conveyors 11(B) and GG(x2)
- Screw Conveyors Q1, 25, 25A, 28, 19, 46, Q2 and S1
- Bulk Curing Bins 1, 2, 3, or 7
- Bucket Elevators 10, 16, B, GG#5
- Sweco Shaker Screen
- Rotex Screen 9346 (to GG#8)

System “B”, Rotoclone No. 2 (EU 022) controls twenty drop points at the Fluidized Bed System and four at the Rotary Dryer System. The drop points include the following:

- Belt Conveyor 19, 11(T), GG8(x2)
- Screw Conveyors 12(x3), 14, 20, 40, 45 and S2
- Packing Room Bins (5 pound and 100 pound)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

- Bulk Curing Bins 4, 5, or 6
- Bucket Elevators 43 and 15
- Production Scale, Silo Scale, HN-1, Rotex

System “C”, Roto-clone No. 7 (EU-055) controls thirteen drop points in the Fluidized Bed System, and one drop point in the Rotary Dryer System. The drop points include the following:

- Belt Conveyors A(x2) and B(x2)
- Screw conveyors 20A, 26, 27, 29, 30, 42, and N
- Reject Chute
- Curing Bin

The Bulk Load-Out Operation (EU 034) with a design equipment capacity of 600 TPD is used to load sugar into either trucks or railcars. The operation includes a silo and a three-sided building. Emissions of fugitive particulate matter are controlled by a baghouse manufactured by MAC Equipment.

The Transfer Bulk Load-Out Station (EU 035) with a design equipment capacity of 1200 TPD is used to supply sugar to the Transshipment Facility. The operation includes four enclosed conveyors in series feeding refined sugar from the storage silo or bulk curing bins to an enclosed load-out building. Emissions of fugitive particulate matter are controlled by use of the enclosure and high-pressure air curtains.

Two types of alcohol, isopropyl alcohol and organic ethanol, are used in the sugar refinery to aid in the crystallization process in the vacuum pans (EU 043). Isopropyl alcohol is used in the production of standard refined sugar and is the primary source of VOC emissions. Organic ethanol is used in the production of organic sugar.

Four sugar Packaging Lines (Nos. 17, 18 and 19) and the bulk packaging line are located in Warehouse No. 3. The potential emissions from the packaging lines and the new conveyor of the bulk packaging line consists of PM in the form of sugar dust and are controlled by one dust collector (baghouse) (EU 059). Air pickup points on the new conveyor will also be controlled by the Packaging Line 10 (EU 029) baghouse. The Packaging Line 10 (EU 029) baghouse has been determined to be exempt from permitting.

For the sugar refinery, dust-generating activities that are completely enclosed and vented within the building are not classified as air pollution sources.

Essential PTE Parameters

F.1. Permitted Capacities. Total refined sugar production (EUs 021, 023, 024 and 025) shall not exceed 490,000 tons during any consecutive 52-week period, and:

- a. The Rotary System (EUs 021, 023 and 024) shall not process more than 130,000 tons of refined sugar during any consecutive 52-week period.
- b. The Bulk Load-Out Operation (EU 034) shall not process more than 139,000 tons of refined sugar during any consecutive 52-week period.
- c. The Transfer Bulk Load-Out Station (EU 035) shall not process more than 351,000 tons of refined sugar during any consecutive 52-week period.
- d. Isopropyl alcohol usage (EU 043) from the sugar refinery shall not exceed 78,040 pounds during any consecutive 52-week period.

e. Permitted Capacity: Production rate for the three (3) combined packed Sugar/Sweeteners packaging lines (Nos. 17, 18, and 19) and the bulk bag packaging line is 600 tons per day (TPD).

[Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and, Permit Nos. 0990005-027-AC, 035-AC, 037-AC & 048-AC]

F.2. Hours of Operation. These emissions units may operate continuously (i.e., 8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0990005-027-AC, 035-AC & 037-AC.]

F.3. Methods of Operation. The owner or operator is authorized to operate the dryers as follows:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

- a. The Fluidized Bed Dryer (EU 025) only;
- b. **Rotary Dryer System (EU 021) only**; the owner or operator is authorized to operate the **rotary dryer** system in either of the following two methods:
- (1) **32-Stage High Production Mode**: The **Rotary Dryer (EU 021) system** is operated with Cooler No. 1 (EU 023) and Cooler No. 2 (EU 024) in series. In this mode, high production rates are approximately 1000 TPD for white refined sugar and above 6500 TPD for specialty sugars.
 - (2) **12-Stage Low Production Mode**: **The Rotary Dryer (EU 021) is off and** Cooler No. 1 (EU-023) is operated as a dryer followed by Cooler No. 2 (EU-024) in series. In this mode, low production rates are below 500 TPD for specialty sugars.
- c. The Fluidized Bed Dryer (EU 025) and Rotary System (EUs **021, 023 & 024**) may be operated simultaneously. The dryers and sugar refinery are subject to the production and processing limitations specified in Specific Condition **F.1** of this subsection.
- [Rules 62-4.070(3), 62-210.200 (PTE), F.A.C.; and, Permit No. 0990005-021-AC]

Control Technology

F.4. Baghouse Design Specifications.

- a. *Fluidized Bed Dryer (EU 025)*: To control emissions from the Fluidized Bed Dryer (EU 025), the permittee shall operate and maintain a baghouse control system with the following specifications:

Parameter	Specification
Design exhaust flow rate	70,620 acfm
Filtering area	9041 ft ²
Air-to-cloth ratio	7.81 cfm/ft ²
Control efficiency	99.8% (PM and PM ₁₀)

[Rule 62-4.070(3), F.A.C.; and, Permit No. 0990005-021-AC]

- b. *Bulk Load-Out Operation (EU 034)*: To control PM emissions from the Bulk Load-Out Operation (EU 034), the permittee shall operate and maintain a baghouse control system with the following specifications:

Parameter	Specification
Design exhaust flow rate	3,400 acfm
Filtering area	1536 ft ²
Air-to-cloth ratio	2.2:1 cfm/ft ²
Control efficiency	99.8% (PM and PM ₁₀)

[Rule 62-4.070(3), F.A.C.; and, Permit No. 0990005-035-AC]

- c. *Packaging Lines Nos. 17, 18, 19 and bulk bag line (EU 059)*: To control PM emissions from Packaging Lines Nos. 17, 18 and 19 in Warehouse No. 3 (as well as the bulk packaging line), the permittee shall operate and maintain a baghouse control system with the following specifications:

Parameter	Specification
Design exhaust flow rate	7,500 acfm
Filtering area	3,261 ft ²
Air-to-cloth ratio	2.3:1 cfm/ft ²
Control efficiency	0.002 gr/acf

[Rule 62-4.070(3), F.A.C.; and, Permit No. 0990005-045-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

F.5. Cyclonic Control Devices. The permittee shall operate and maintain the following emissions units and corresponding control equipment in accordance with the specifications identified in the table below:

EU No.	Description	Control Type	Design Flow Rates acfm	Water Injection Rate (gpm, min.)	Control Efficiency	
					PM	PM ₁₀
021	Rotary Dryer System No. 1	Rotoclone No. 1	15,000	2	99.9%	99%
022	"B" System	Rotoclone No. 2	14,770	2	99.9%	99%
023	Cooler No. 1	Rotoclone No. 3	15,000	2	99.9%	99%
024	Cooler No. 2	Rotoclone No. 4	15,000	2	99.9%	99%
054	"A" System	Rotoclone No. 6	15,078	2	99.9%	99%
055	"C" System	Rotoclone No. 7	12,895	2	99.9%	99%

[Rule 62-4.070(3), F.A.C. and Permit No. 0990005-021-AC and 0990005-027-AC]

F.6. Circumvention. The owner or operator shall not circumvent or operate the air pollution control equipment in such a manner which would violate allowable emission rates established for these units. [Rule 62-210.650, F.A.C.]

Emissions Limitations and Standards

F.7. Visible Emissions. Visible emissions shall not exceed the following standards for the units listed below:

EU No(s).	Opacity Standard
021, 022, 023, 024, 025, 034, 054, 055, 059	5% opacity
035	20% opacity

[Rules 62-296.320(4)(b) and 62-297.620(4), F.A.C.; Permit Nos. 0990005-021-AC, -035-AC, & -037-AC.]

F.8. PM/PM₁₀ Emissions. The sum of emissions from all emissions units listed in Specific Condition **E.9.** shall not exceed 21.07 tons of PM per year and 2.961 tons of PM₁₀ per year. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0990005-042-AC]

F.9. Potential PM/PM₁₀ Emissions. *For informational purposes only*, the following table summarizes the potential emissions from the sugar refinery emissions units:

EU No.	Description	Tons/Year	
		PM	PM ₁₀
021	Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1	4.09	1.64
022	Central Dust Collection System No. 2 with Rotoclone No. 2 ("B" System)	0.54	0.215
023	Cooler No. 1 with Rotoclone No. 3	4.09	1.64
024	Cooler No. 2 with Rotoclone No. 4	0.45	0.18
025	Fluidized Bed Dryer/Cooler with Baghouse	14.70	0.59
034	Bulk Load-Out Operation	1.28	0.051
035	Transfer Bulk Load-out Station	1.83	0.073
054	Rotoclone No. 6 ("A" System)	0.46	0.184
055	Rotoclone No. 7 ("C" System)	0.33	0.133
059	Baghouse, Pkg. Lines 17, 18, 19 and bulk bag line	0.56	0.022

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

[Rules 62-4.070 and 62-210.200(PTE), F.A.C.; and, Permit No. 0990005-045-AC]

F.10. PM/PM₁₀ Emission Factors. The permittee shall use the following emission factors to calculate PM/PM₁₀ emissions (including calculations for the AOR).

EU No.	Description	PM		PM ₁₀	
		Uncontrolled	Control Efficiency	Uncontrolled	Control Efficiency
021	Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1	3.150% (from dryer)	99.9%	0.125% (from dryer)	99.0%
022	Central Dust Collection System No. 2 with Rotoclone No. 2 ("B" System)	1.777 lb/ton	99.9%	0.071 lb/ton	99.0%
023	Cooler No. 1 with Rotoclone No. 3	0.175%	99.9%	0.007%	99.0%
024	Cooler No. 2 with Rotoclone No.4	0.175%	99.9%	0.007%	99.0%
025	Fluidized Bed Dryer/Cooler with Baghouse	1.5%	99.8%	0.060%	99.8%
034	Bulk Load-Out Operation with Baghouse	—	0.010 gr/acf	—	0.00040 gr/acf
035	Transfer Bulk Load-out Station	0.105 lb/ton	90%	0.00418 lb/ton	90%
054	Rotoclone No. 6 ("A" System)	1.463 lb/ton	99.9%	0.059 lb/ton	99.0%
055	Rotoclone No. 7 ("C" System)	0.105 lb/ton (Rotary Dryer) 1.254 lb/ton (Fluidizer Drying)	99.9%	0.0042 lb/ton (Rotary Dryer) 0.050 lb/ton (Fluidizer Drying)	99.0 %
059	Pkg. Lines 17, 18, 19 and bulk bag line with Baghouse (Warehouse 3).	—	0.002 gr/acf	—	4% of PM

[Rule 62-4.070(3), F.A.C.; and, Permit Nos. 0990005-021-AC, -027-AC, -035-AC, -037-AC & -045-AC]

F.11. VOC Emissions. VOC emissions from alcohol usage shall not exceed 39.00 tons during any consecutive 52- week period. (*Permitting Note: VOC emissions are mainly contributed from isopropyl alcohol.*) [Permit No. 0990005-021-AC]

Test Methods and Procedures

F.12. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
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. [Rule 62-204.800, F.A.C.; and, Permit Nos. 0990005-021-AC, -027-AC, -035-AC & -037-AC]

F.13. Common Testing Requirements. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Units 021-025, 034, 035, 043, 054, 055 & 059, Okeelanta – Sugar Refinery

{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.fldeportal.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.}

F.14. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU listed in Specific Condition **F.7** of this subsection, excluding **EU 059**, shall be tested to demonstrate compliance with the opacity (VE) standard [Rule 62-297.310(8), F.A.C.; and, Permit Nos. 0990005-021-AC, -035-AC & -037-AC]

F.15. 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 be performed for VE prior to obtaining a renewed operation permit to demonstrate compliance with the visible emission limits in Specific Condition **F.7**. [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

F.16. PM Testing: The PM compliance test requirements are waived in lieu of the alternative opacity standard of 5 percent for each EU listed in Specific Condition **F.9** of this subpart. If the Department has reason to believe that the PM emission standard applicable to the emission unit is not being met, it shall require that compliance be demonstrated by the test method specified in Specific Condition **F.12**. [Rule 62-4.070, F.A.C.; and, Permit Nos. 0990005-021-AC, -035-AC & -037-AC]

Recordkeeping and Reporting Requirements

F.17. Recordkeeping During Testing. The permittee shall record the actual sugar processing rate for the emissions units being controlled and tested. [Rule 62-297.310, F.A.C.; and, Permit No.: 0990005-021-AC, -035-AC & -037-AC]

F.18. Test Reports. For each visible emissions test conducted, the permittee shall submit a test report to each Compliance Authority as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Each test report shall include the information specified in Rule 62-297.310(10), F.A.C. [Rule 62-297.310(10), F.A.C.; and Permit Nos. 0990005-021-AC, -035-AC & -037-AC]

F.19. Operational Data. The permittee shall maintain daily and weekly records to demonstrate compliance with the permit limitations specified in Specific Condition **F.1** of this permit. The daily and weekly records shall include, at a minimum, the following: the date; the hours of operation; the total refined sugar produced; the refined sugar produced from the fluidized bed sugar drying system; the refined sugar production from the rotary sugar dryer system (including coolers); quantity of refined sugar handled through the bulk load out area; quantity of refined sugar handle through the transshipment load out area; weekly use of isopropyl alcohol and organic ethanol; and weekly rolling consecutive 52-week period total for all permitted refined sugar production limits. [Rule 62-4.070(3), F.A.C., and Permit Nos. 0990005-021-AC & -035-AC]

F.20. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Units 018-020, 030, 045, & 046 & 049, Okeelanta – Transshipment Facility

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
018	Central vacuum system No. 1
019	Sugar packaging Lines 0-4, 5A and 9
020	Sugar grinder
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)
045	Powdered Sugar Dryer/Cooler, Packaging Lines 8A, 8B, 12, 13, and 14
046	Powdered sugar grinder
049	Baghouse (currently inactive)

Sugar received at the transshipment facility is either directly packaged or temporarily stored before packaging. Extra-fine granulated sugar from the refinery is delivered to one of two locations at the transshipment facility. At the east receiving dock, trucks are pneumatically unloaded into a main sugar receiver, which transfers sugar into surge bins above the packaging lines. At the north side of the facility, trucks are unloaded at a bulk receiving station by locking a boot mechanism against the truck's hopper followed by screw conveyors which transfer sugar to a bucket elevator feeding one of three storage silos (EU 030).

Each of the three storage silos (EU 030) is 12 feet in diameter of 12 feet, 68 feet tall, and has a volume of approximately 4,600 cubic feet. Each silo is controlled by a baghouse. Sugar is transferred from each silo by screw conveyor into surge bins located above the packaging lines.

Sugar is packaged in one of twelve packaging lines at the Transshipment Facility, all of which are controlled by baghouse systems: Lines 0-4, 5A, and 9 (EU 019), and Lines 8A, 8B, 12, 13 & 14 (EU 045). EU 049 is currently inactive. Sugar is metered from surge bins above the packaging lines for processing into a variety of packages and containers for wholesale and retail distribution.

A small portion of extra-fine granulated sugar is conveyed to the two sugar grinders (EU 020 and EU 046) and mixed with starch to produce powdered sugar. The sugar grinders are used to reduce the sugar solids to a desired particle size. The grinders have a design capacity of approximately 4 tons per hour each. All units are controlled by baghouse systems. In addition, brown sugar may be produced by mixing light or dark molasses with the extra fine granulated sugar. The packaging lines processing the brown sugar do not produce sugar dust and therefore do not require ventilation outside the building.

A central vacuum system (EU 018) is used periodically for housekeeping purposes. The system includes various pick-up points throughout the transshipment facility and is equipped with a cyclonic separator followed by a baghouse. The system has no restrictions on the number or types of pick-up points.

Essential PTE Parameters

G.1. Permitted Capacity. The maximum sugar packaging rate is 1,300 TPD. [Rules 62-4.070(3) & 62-210.200 (PTE), F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]

G.2. Hours of Operation. These emissions units may operate continuously (i.e., 8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]

Control Technology

G.3. Baghouse Design Specifications. Each of the following emissions units shall be controlled by a baghouse that is designed, operated, and maintained to achieve the PM baghouse design specification (grains/scf) identified in the following table.

EU ID	Emission Unit Description	Baghouse	Exhaust	Stack/Vent	Maximum Emissions ^b
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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Units 018-020, 030, 045, & 046 & 049, Okeelanta – Transshipment Facility

		Specification ^a grains/scf	Rate scfm	Height Feet	lb/hour	tons/year
018	Central vacuum system No. 1	0.01	280	8	0.024	0.11
019	Sugar packaging Lines 0-4, 5A and 9	0.005	10,958	27	0.47	2.06
020	Sugar grinder	0.0005	2,961	39	0.01	0.056
030	Sugar silo No. 1 (Point #S1101)	0.02	500	65	0.09	0.38
	Sugar silo No. 2 (Point #S1102)	0.02	500	65	0.09	0.38
	Sugar silo No. 3 (Point #S1103)	0.02	500	65	0.09	0.38
045	Powdered sugar dryer/cooler, Packaging Lines 8A, 8B, 12, 13, and 14	0.01	8,640	48	0.74	3.24
046	Powdered sugar grinder	0.01	1728	42	0.15	0.65
049	Baghouse (currently inactive)	0.02	2,212	9	0.38	1.66
					Total	8.90

a. New and replacement bags shall meet these specifications based on vendor information. No PM emissions tests are required.

b. These rates represent the maximum expected emissions based on the baghouse design specification, the maximum exhaust flow rates, and 8,760 hours of operation per year. These rates are not enforceable emissions standards.

[Permit No. 0990005-045-AC]

G.4. Circumvention. The owner or operator shall not circumvent or operate the air pollution control equipment in such a manner which would violate allowable emission rates established for these units. [Rule 62-210.650, F.A.C.].

Emission Limitations and Standards

G.5. Visible Emissions. As determined by EPA Method 9 observations, visible emissions from each baghouse exhaust point shall not exceed 5 percent opacity. [Rule 62-4.070(3), F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]

Test Methods and Procedures

G.6. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
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. [Rule 62-204.800, F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]

G.7. Common Testing Requirements. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. 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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Units 018-020, 030, 045, & 046 & 049, Okeelanta – Transshipment Facility

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.]

- G.8. 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), compliance tests shall also be performed for visible emissions prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition **G.5.** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

Recordkeeping and Reporting Requirements

- G.9. Recordkeeping During Testing.** The permittee shall record the actual sugar processing rate for the emissions units being controlled and tested. [Rule 62-297.310, F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]
- G.10. Operational Data.** The permittee shall maintain daily and monthly records to demonstrate compliance with the specified maximum sugar packaging rate. [Rule 62-4.070(3), F.A.C.; and, Permit Nos. 0990005-019-AC & -023-AC]
- G.11. 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

- G.12. Compliance Plan.** The permittee shall comply with the provisions of the Compliance Plan as specified in Appendix CP in Section IV of this permit. [Rule 62-213.440(2), F.A.C.]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 048, Okeelanta – Paint Spray Booth

This permit addresses the following emissions unit:

EU No.	Emissions Unit Description
048	Okeelanta – Paint Spray Booth

The paint spray booth is the drive-through model of the Crossflo truck spray booth manufactured by AFC, Inc. (Model Number TSD6036). The paint booth has the potential to emit 9.40 tons per year of volatile organic compound (VOC), 0.47 tons per year of hazardous air pollutants (HAPs), and 0.35 tons per year of particulate matter (PM/PM₁₀). There are two exhaust stacks for the paint spray booth. Both are 25.7 feet tall with a 4-foot diameter and have a flow rate of 45,500 actual cubic feet per minute (acfm).

Essential PTE Parameters

- H.1. Permitted Capacity.** The maximum throughput rate of paint and thinner shall not exceed 4,950 gallons in any consecutive 12 months. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; and, Permit No. 0990005-015-AC]
- H.2. Hours of Operation.** These emissions units may operate continuously (i.e., 8,760 hours per year). [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; and, Permit No. 0990005-015-AC]
- H.3. Methods of Operation.** Paint shall only be applied to agricultural equipment, trailers, and other vehicles or facility equipment. Paint shall be applied by compressed air spray gun, airless paint sprayer or other equipment with equivalent transfer efficiency. Compressed air systems typically use house air within a pressure range of approximately 60 to 80 pounds per square inch (psi). Airless systems typically operate at a pressure of approximately 3,200 psi. [Permit Nos. 0990005-015-AC &-016-AC]

Emission Limitations and Standards

- H.4. VOC Emissions.** Emissions of volatile organic compounds (VOC) shall not exceed 9.40 tons in any consecutive 12 months. The permittee may adjust the amounts and types of coatings used as necessary to comply with this standard. Coatings and thinners used in the spray booth are not restricted to specific products or manufacturers. The permittee may substitute coatings and thinners and adjust the amounts of coatings and thinners used, as needed. [Rule 62-210.200 (PTE), F.A.C.; and, Permit No. 0990005-015-AC]
- H.5. Visible Emissions.** VE from the paint spray booth shall not exceed 20 percent opacity. [Rule 62-296.320, F.A.C.; and, Permit No. 0990005-015-AC]
- H.6. Fugitive VOC.** All equipment, pipes, hoses, containers, lids, fittings, etc. shall be operated and maintained in such a manner as to minimize leaks, fugitive emissions, and spills of materials containing volatile organic compounds (VOC). [Rule 62-210.200 (PTE), F.A.C.; and, Permit No. 0990005-015-AC]

Test Methods and Procedures

- H.7. Special Compliance Tests.** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(8)(c), F.A.C.; and, Permit No. 0990005-015-AC]

Recordkeeping and Reporting Requirements

- H.8. Operational Records.** For each month, the permittee shall record and maintain records of the following: the number of actual hours of operation for the paint booth; the dates of operation; the amounts and types of coatings, thinners and cleanup solvents used; and a monthly calculation of the volatile organic compounds and hazardous air pollutants emitted from the paint booth. VOC/HAP emissions shall be calculated by assuming that all VOC/HAP in the coatings, thinners and cleanup solvents evaporate. The mass fraction of

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 048, Okeelanta – Paint Spray Booth

VOC/HAP from each solvent-containing material shall be determined from the Safety Data Sheets (SDS) supplied by the vendors. The permittee shall maintain a file of SDS for each solvent-containing material that indicates the composition of the VOC/HAP. Solvent-containing materials include, but are not limited to, powder coatings, solvent coatings, thinners, and cleanup solvents. The file must be maintained on site and made available for inspection upon request. The permittee shall have until the last day of the following month to complete these records. The amounts and types of coatings used and the calculated VOC and HAP emissions shall be included in the required AOR. [Rules 62-4.070(3) & 62-210.370, F.A.C.; and, Permit 0990005-015-AC]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 060, Okeelanta – Emergency Fire Pumps

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

EU No.	Emissions Unit Description
060	Okeelanta – Emergency Fire Pumps

This emissions unit consists of two (2) stationary compression ignition (CI) diesel fuel-fired reciprocating internal combustion engines (RICE) used to drive emergency fire pumps.

The following table provides important details for these units:

EU Description	Duty	Engine Brake HP	Year Installed	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer/ Model No.
Emergency Fire Pump #1 Rock Pit by Cooling Tower	Emergency	160 (119 kW)	Prior to 2005	2002	1.13	John Deere 6068TF220
Emergency Fire Pump # 2 Rock Pit by Cooling Tower	Emergency	160 (119 kW)	Prior to 2005	2002	1.13	John Deere 6068TF220

{Permitting Note: These CI 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 engines are exempted from regulations under 40 CFR 60, Subpart IIII, New Source Performance for Stationary Internal Combustion Engines, based on the manufacturer date. This is an “existing” stationary emergency CI RICE less than or equal to 500 HP, with a displacement of less than 10 liters per cylinder that is located at a major source of HAP and that has not been modified or reconstructed after 6/12/2006.}

Essential PTE Parameters

I.1. Hours of Operation. In order for these RICE to be considered emergency RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs I.1.a through I.1.c, is prohibited. If these RICE are not operated according to the requirements of paragraphs I.1.a through I.1.c, the RICE will not be considered emergency RICE under Subpart ZZZZ and must meet all requirements for non-emergency RICE.

- Emergency Situations.** There is no time limit on the use of these fire pump engines in emergency situations. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(1)]
- Maintenance and Readiness Testing.** These engines are 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. Operation for maintenance checks and readiness testing is limited to 100 hours per year. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(2)(i)]
- Non-emergency Situations.** This engine is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6640(f)(3)]
- Engine Startup.** During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(h)]

Emission Limitations and Operating Requirements

I.2. Work or Management Practice Standards.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 060, Okeelanta – Emergency Fire Pumps

- a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first or use an oil analysis program to extend this interval (see Specific Condition **H.2.e.** below). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, Table 2(c)(1) and footnote 2]
- b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6602, Table 2c(1)(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 the permittee's 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(e)]
- e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph **I.2.a.** of this condition. 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 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 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(i)]

Monitoring of Operations

- I.3. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6625(f)]

Compliance Requirements

- I.4. Continuous Compliance.** Each unit shall be in compliance with the operating standards in this section at all times. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6605(a)]
- I.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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6605(b)]

Recordkeeping and Reporting Requirements

- I.6. Hours of Operation Records.** The owner or operator must keep records of the hours of operation of the engines that is recorded through the non-resettable hour meter. The records 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(f)]
- I.7. Compliance Records.** The owner or operator must keep records to show continuous compliance with each emission limitation or operating requirement in Specific Condition **I.2.d.** of this subsection. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(d)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 060, Okeelanta – Emergency Fire Pumps

I.8. Malfunction Records.

- a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
- b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(a)(2) & (5)]

I.9. Maintenance Records.

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6655(a)(4) & (e)]

I.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.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6660 & 40 CFR 63.10(b)(1)]

- I.11. Emergency Situations.** 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 **I.2.** of this subsection, 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

General Provisions

- I.12. 40 CFR 63 Subpart A, General Provisions.** The owner or operator shall comply with the applicable requirements of 40 CFR 63 Subpart A, General Provisions, as specified below:

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(b)(1)-(4)	Compliance Dates for new and reconstructed sources
§ 63.6(b)(5)	Notification
§ 63.6(c)(1)-(2)	Compliance dates for existing sources
§ 63.6(f)(2)	Methods of determining compliance
§ 63.6(f)(3)	Finding of compliance
§ 63.6(g)(1)-(3)	Use of alternate standards
§ 63.6(i)	Compliance extension procedures and criteria
§ 63.9(a)	Applicability and State delegation of notification requirements

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 060, Okeelanta – Emergency Fire Pumps

General Provisions Citation	Subject of Citation
§ 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(d)(4)	Progress Reports
§ 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 63.6665]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Units 061 & 062, Okeelanta – Non-Emergency Engines

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

EU No.	Emissions Unit Description
061	Okeelanta - Non-Emergency CI Engines (Tier 3 Certified)
062	Okeelanta – Non-Emergency CI Engine (Tier 4 Certified)

The following table provides important details for these units:

EU No.	Engine Description	Duty	Engine Brake (HP)	Year Installed	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer/ Model No.
061	Ditch 10 between Fuel Islands	Non-Emergency	168 (125 kW)	2015	2014	0.75	Case: Model P-170A
	Intake Water Center Canal East	Non-Emergency	168 (125 kW)	2017	2014	0.75	Case: Model P-170A
	Waste Water Pond West 1	Non-Emergency	168 (125 kW)	2018	2014	0.75	Case: Model P-170A
	Waste Water Pond West 2	Non-Emergency	120 89 (kW)	2018	2014	0.75	Case: Model P-120A
	Waste Water Pond East	Non-Emergency	168 (125 kW)	2018	2014	0.75	Case: Model P-170A
	Ditch 10 Wastewater Metering Pump	Non-Emergency	168 (125 kW)	2018	2014	0.75	Case: Model P-170A
	Pump between North & South Cachaza Pond	Non-Emergency	17355 (12916 kW)	2018	2010	1.12	Case: Model P-170
	Waste Water Re-Use Pump at Railroad Tracks	Non-Emergency	17355 (12916 kW)	2015	2010	1.12	Case: Model P-170
062	DC Drainage Pump	Non-Emergency	74 (55 kW)	2022	2019	1.13	John Deere: Model No. 4045TFC03

{Permitting Notes: These CI RICE are regulated under 40 CFR 63, Subpart ZZZZ, NESHA for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. These RICE are not fire pumps. EU 061 consists of eight (8) “new” Tier 3 certified stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP, that commenced construction after 6/12/2006, and that has a post-2007 model year. EU 062 is a “new” Tier 4 certified stationary non-emergency CI RICE with a displacement less than 10 liters per cylinder, located at a major source of HAP, that commenced construction after 6/12/2006, and that has a post-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6) & (7), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ for all engines.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Units 061 & 062, Okeelanta – Non-Emergency Engines

Essential PTE Parameters

- J.1. Authorized Fuel.** These RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:
- Sulfur Content.* The sulfur content shall not exceed 15 ppm or 0.0015% by weight (ultra-low sulfur) for non-road fuel.
 - Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
 - Use of Existing Fuel.* Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- [40 CFR 60.4207(b) & 1090.305]

- J.2. Hours of Operation.** Not restricted for non-emergency engines - 8,760 hours per calendar year. [Rule 62-210.200(PTE), F.A.C.]

- J.3. Operation and Maintenance.** These RICE must be maintained and operated to meet the emissions limits in Specific Conditions J.4. - J.6. over the entire life of the engine. The owner or operator must do all of the following except as provided under Specific Condition **J.7**:
- The owner or operator must operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions;
 - or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only Change those settings that are permitted by the manufacturer; and
 - These RICE must be maintained and operated to meet the emissions limits in Specific Conditions J.4. - J.6. over the entire life of the engine. Meet the requirements of 40 CFR 1068 as they apply to the owner or operator.

[40 CFR 60.4206 & 60.4211(a)(1), (2) & (3)]

Emissions Limitations and Standards

- J.4. NO_x + NMHC Emissions.** Emissions of NO_x plus non-methane hydrocarbons (NMHC) shall not exceed the following limits:

- EU 061. For engines with 2010 model years, 4.0 grams per kilowatt hour (g/kW-hr);

- EU 061. For engines with 2014 and later model years:

- NO_x. 0.40 g/kW-hr; and

- NMHC. 0.19 g/kW-hr.

- EU 062. 4.7 g/kW-hr.

[40 CFR 60.4204(b), 40 CFR 60.4201(a), 1039.101(b); & 40 CFR 1030.102(b), & Appendix I to 40 CFR 1039]

- J.5. CO Emissions.** Carbon monoxide (CO) emissions shall not exceed the following limits:

- EU 061. 5.0 g/kW-hr.

- EU 062. 5.0 g/kW-hr.

[40 CFR 60.4204(b), 40 CFR 60.4201(a), 1039.101(b); & 40 CFR 1030.102(b), & Appendix I to 40 CFR 1039]

- J.6. PM Emissions.** Particulate matter (PM) emissions shall not exceed the following limits:

- EU 061.

- For engines with 2010 model years, 0.3 g/kW-hr; and

- For engines with 2014 and later model years, 0.02 g/kW-hr.

- EU 062: 0.03 g/kW-hr.

[40 CFR 60.4204(b), 40 CFR 60.4201(a), 1039.101(b); & 40 CFR 1030.102(b), & Appendix I to 40 CFR 1039]

Testing and Compliance Requirements

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Units 061 & 062, Okeelanta – Non-Emergency Engines

J.7. Engine Certification Requirements. The permittee must demonstrate compliance by having purchased an engine certified according to the emission standards Specific Conditions **J.4. - J.6.** The engine must be installed and configured according to the manufacturer's emission-related specifications. If the emission-related settings are changed in a way not permitted by the manufacturer, an initial performance test according to the requirements in Specific Condition **J.8** is required within 1 year of such action, and retesting is required every 8,760 hours or 3 years whichever comes first. The owner of this engine must then keep a maintenance plan and keep 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. [40 CFR 60.4211(b), (c) & (g)]

J.8. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **J.7.**, 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. 40 CFR Part 1039, Subpart F
- b. *NTE Standards – New Engines.* Exhaust emissions from stationary CIICE that are complying with the emission standards for new CI engines in 40 CFR 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR 1039.
- c. *NTE Standards.* Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in Specific Conditions **J.4. - J.6.**, determined from the following equation:
NTE Requirement for Each Pollutant = (1.25) x (STD) (Eq. 1)

Where:

STD = The standard specified for that pollutant in 40 CFR 1039 or 1042, as applicable.

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

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

Recordkeeping and Reporting Requirements

J.10. 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 **J.7.** and **J.8.**, 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.; and, 40 CFR 60.4211(c)& (g)]

J.11. Testing Notification. At such time that the requirements of Specific Condition **J.8.** 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)]

{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.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Units 061 & 062, Okeelanta – Non-Emergency Engines

- J.12.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]
- J.13.** Test reports. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.]

General Provisions

- J.14.** 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.

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 and Table 8 to 40 CFR 60, Subpart III]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Units 057, Okeelanta – 300 HP Gas Fired Boiler

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

EU No.	Emissions Unit Description
057	12.17 MMBtu/hour Natural Gas-Fired Boiler

The following table provides important details for this boiler:

Boiler Identification	Startup Date	Model Year	Maximum Heat Input	Boiler Manufacturer	Model No.
Fire Tube	Prior to 2011	Prior to 2011	12.17 MMBtu/hour	Cleaver Brooks	CBLE 200

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

Essential PTE Parameters

K.1. Permitted Capacity. The boiler is limited to a maximum annual heat input of 12.17 MMBtu/hour. [Design; Rule 62-210.200(PTE), F.A.C.]

K.2. Authorized Fuel. This boiler is permitted to be fired with natural gas only. [Rule 62-210.200(PTE), F.A.C.]

K.3. Hours of Operation. The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

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

K.4. Visible Emissions. Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

K.5. Particulate Matter (PM) Emissions. Particulate Matter Emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.]

K.6. Sulfur Dioxide (SO₂) Emissions. Sulfur Dioxide emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.]

Excess Emissions

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

K.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Units 057, Okeelanta – 300 HP Gas Fired Boiler

Monitoring of Operations

K.9. Compliance with tune-ups. For this boiler, the permittee shall conduct an annual tune-up to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(10) and Table 3.]

Test Methods and Procedures

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

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

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

K.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.]

Recordkeeping and Reporting Requirements

K.12. Annual Compliance Report. The permittee shall submit an annual compliance report to the Department for each calendar year (January 1st to December 31st) containing the following information:

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

Reports must be submitted within 60 days after the end of the calendar year. [Rule 62-4.070(3), F.A.C.; and, 40 CFR 63.7550(a), (b)(5), & 63.7550(c)]

K.13. Fuel Recordkeeping. The records of natural fuel gas shall be kept by the owner or operator, available for Department inspection for five years. [Rules 62-4.070(3), F.A.C.]

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

Other Applicable Requirements

K.15. NESHAP 40 CFR 63, Subparts A and DDDDD Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A (General Provisions) and Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters), attached to this permit as Appendix NESHAP, Subpart A and Appendix NESHAP, Subpart DDDDD, respectively. [Rule 62-213.440, F.A.C.; 40 CFR 63, Subparts A and DDDDD]

TABLE OF CONTENTS

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection L. Emissions Units 063, Okeelanta – DC Fire Pump

This section of the permit addresses the following emissions unit:

EU No.	Emission Unit Description
063	DC Fire Pump

The following table provides important details for this unit:

EU No.	Engine Description	Duty	Engine Brake (HP)	Year Installed	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer/ Model No.
063	DC Fire Pump	Emergency	274 (204 kW)	2021	2021	1.13	Clarke: Model No. JU6H-UFADT0

{Permitting Note: This emissions unit is regulated under 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This emissions unit is a “new” emergency CI RICE with a displacement less than 10 liters per cylinder, located at a major source of HAP, that commenced construction after 6/12/2006, and that has a post-2007 model year. This engine is a fire pump. In accordance with provisions of 40 CFR 63.6590(c)(7), meeting the requirements of 40 CFR 60, subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}

Essential PTE Parameters

- L.1. Authorized Fuel.** This RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:
- Sulfur Content.** The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.
 - Cetane and Aromatic.** The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
 - Use of Existing Fuel.** Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used till depleted.

[Application Permit No. 0990005-046-AC; 40 CFR 60.4207(b) and 40 CFR 1090.305; and Rule 62-210.200(PTE), F.A.C.]

- L.2. Hours of Operation.** In order for these RICE to be considered emergency RICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs L.2.a through I.1.c, is prohibited. If these RICE are not operated according to the requirements of paragraphs L.2.a through I.1.c, the RICE will not be considered emergency RICE under Subpart ZZZZ and must meet all requirements for non-emergency RICE.

- Emergency Situations.** There is no time limit on the use of emergency stationary ICE in emergency situations.
- Maintenance and Readiness 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.
- Non-emergency Situations.** This unit is authorized to operate 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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection L. Emissions Units 063, Okeelanta – DC Fire Pump

100 hours per calendar year for maintenance and testing provided in paragraph **L.2.b** above. Except as provided in paragraph **L.2.d** below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

d. *Other Situations.* The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
- (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
- (4) The power is provided only to the facility itself or to support the local transmission and distribution system;
- (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[Application Permit No. 0990005-046-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and 40 CFR 60.4211(f)]

Emission Limitations and Standards

- L.3.** NO_x + NMHC Emissions: Emissions of NO_x plus non-methane hydrocarbons shall not exceed 4.0 g/kW-hr (3.0 g/hp-hr). [Application Permit. 0990005-046-AC; 40 CFR 60.4205(c), 40 CFR 60.4202(d) and Table 4 to Subpart III]
- L.4.** PM Emissions: Emissions of PM shall not exceed 0.2 g/kW-hr (0.15 g/hp-hr). [Application Permit No. 0990005-046-AC; 40 CFR 60.4205(c), 40 CFR 60.4202(d) and Table 4 to Subpart III]
- L.5.** CO Emissions: Emissions of CO shall not exceed 3.5 g/kW-hr (2.6 g/hp-hr). [Application Permit No. 0990005-046-AC; 40 CFR 60.4205(c), 40 CFR 60.4202(d) and Table 4 to Subpart III]

Test Methods and Procedures

- L.6.** Engine Certification Requirements: The permittee shall demonstrate compliance with the emissions standards in Specific Conditions **L.3.** - **L.5.** by having purchased an engine certified by the manufacturer to meet those limits. The engine must be installed and configured according to the manufacturer's emission-related specifications. If the emission-related settings are changed in a way not permitted by the manufacturer, an initial performance test according to the requirements in Specific Condition **L.7.** is required within one year of such action, or within one year of startup. The owner of this engine must then keep a maintenance plan and keep 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. [40 CFR 60.4211(a), (c) & (g)(2)]
- L.7.** Testing Requirements: In the event performance tests are required pursuant to Specific Condition **L.6.**, the following requirements must be conducted according to the in-use testing procedures in 40 CFR 1039, Subpart F. [40 CFR 1039, Subpart F](#) [40 CFR 60.4212(a); and Rules 62-4.070(3) and 62-297.310(8)(b)1, F.A.C.]
- L.8.** Test Requirements: At such time that the requirements of Specific Condition **L.7.** become applicable, the permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection L. Emissions Units 063, Okeelanta – DC Fire Pump

~~L.9. Compliance Test 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 NO_x + NHMC, PM, and CO emissions prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Conditions L.3. – L.5. [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]~~

Monitoring of Operations

L.10. Hour Meter: The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 6-24.070(3), F.A.C.; 40 CFR 60.4209(a)]

Recordkeeping and Reporting Requirements

L.11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.]

L.12. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

~~L.13. Special Annual Report. The permittee shall submit an annual report according to the following requirements if the engine is operated for the reason in Specific Condition L.2.d.~~

~~a) The report must contain the following information:~~

~~i) Company name and address where the engine is located.~~

~~ii) Date of the report and beginning and ending dates of the reporting period.~~

~~iii) Engine site rating and model year.~~

~~iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.~~

~~v) Hours spent for operation for the purpose specified in L.2.d, including the date, start time, and end time for engine operation for the special purpose. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.~~

~~b) The annual report must be submitted no later than March 31 of the following calendar year.~~

~~c) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI).~~

~~{Permitting Note: The reporting form is accessed through EPS's Central Data Exchange (CDX)(www.epa.gov/cdx).}~~

~~[40 CFR 60.4214(d)]~~

General Provisions

L.14. 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.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection L. Emissions Units 063, Okeelanta – DC Fire Pump

General Provisions Citation	Subject of Citation
§ 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 and Table 8 to 40 CFR 60, Subpart IIII]

[TABLE OF CONTENTS](#)