

**Okeelanta Corporation  
Okeelanta Sugar Mill and Refinery**

Facility ID No. 0990005

**New Hope Power Company  
Okeelanta Cogeneration Plant**

Facility ID No. 0990332

**Palm Beach County**

**Title V Air Operation Permit Renewal**

**Permit No. 0990005-040-AV**



**Permitting Authority:**

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

State of Florida  
Palm Beach County Health Department  
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**PERMITTEE:**

Okeelanta Corporation  
New Hope Power Company  
8001 U.S. Highway 27 South  
South Bay, Florida 33493

Permit No. 0990005-040-AV  
Okeelanta Corporation  
Facility ID No. 0990005  
New Hope Power Company  
Facility ID No. 0990332  
Title V Air Operation Permit

The purpose of this permitting project is to renew the Title V air operation permit for the above referenced facility. The facility is operated by the Okeelanta Corporation (ARMS ID No. 0990005) and the New Hope Power Company (ARMS ID No. 0990332). Okeelanta Corporation operates an existing sugar mill (SIC No. 2061) and sugar refinery (SIC No. 2062) and New Hope Power Company operates a cogeneration plant (SIC No. 4911).

The existing facility is located in Palm Beach County at 8001 U.S. Highway 27 South, South Bay, Florida. The map coordinates are UTM Zone 17, 524.90 km East and 2940.10 km North (Latitude 26° 35' 00" North / Longitude 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.

0990005-040-AV: Effective Date: May 12, 2015  
Renewal Application Due Date: September 29, 2019  
Expiration Date: May 11, 2020

*For:*

Jeffery F. Koerner, Deputy Director  
Division of Air Resource Management

JFK/dlr/tbc

**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 cogeneration plant 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 (3) - 760 million British thermal units per hour (MMBtu/hr) per hour cogeneration boilers; transfer and storage of wood chip and bagasse fuels; distillate oil storage tanks; transfer and storage of sugar; and a paint spray booth. The facility includes other miscellaneous “unregulated” emissions units and activities.

**B. Regulatory Categories**

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate any units subject to the Title IV acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility is subject to Chapter 62-17, F.A.C., for power plant site certification because it produces more than 75 MW of steam-generated electrical power. [Site Certification No. PA 04-46]
- Existing units are subject to the following New Source Performance Standards (NSPS) in Part 60 of Title 40, the Code of Federal Regulations (CFR): Subpart A (General Provisions),
- NSPS Part 60, Subpart Da (Electric Utility Steam Generating Units).
- Units are subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions).
- Units are potentially subject to 40 CFR 63 Subpart DDDDD-National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. [Rule 62-213.440, F.A.C.]
- *{Permitting Note: 40 CFR 63 Subpart DDDDD applicability to the NHPC cogeneration units is currently subject to reconsideration by US EPA.}*
- *Appendix SS provides a summary of the applicable requirements for each regulated unit.*

**C. Regulated Pollutants****Criteria Pollutants**

Emissions units at this facility may emit one or more of the following criteria air pollutants: carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>), volatile organic compounds (VOC) and lead (Pb).

**Other Regulated PSD Pollutants**

In addition to the above criteria air pollutants, emissions units at this facility may emit one or more of the following PSD pollutants: fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H<sub>2</sub>S); total reduced sulfur (TRS), including H<sub>2</sub>S; reduced sulfur compounds, including H<sub>2</sub>S; and mercury (Hg).

**Hazardous Air Pollutants**

Emissions units at this facility may emit one or more hazardous air pollutants (HAP) as defined in Rule 62-210.200, F.A.C.

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**SECTION 1. FACILITY INFORMATION**

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**D. Summary of Regulated Emissions Units**

Please refer to the appropriate Permit No., Facility ID No. and Emissions Unit No. on all correspondence, test report submittals, applications, etc.

**ARMS ID No. 0990005 - Okeelanta Corporation**

<b>EU No.</b>	<b>Emissions Unit Description</b>	<b>Process Area</b>
<b>018</b>	Central Vacuum System No. 1	Transshipment Facility
<b>019</b>	Sugar Packaging Lines 0-4, 5A and 9	Transshipment Facility
<b>020</b>	Sugar Grinder	Transshipment Facility
<b>021</b>	Rotary Dryer, Central Dust Collection System No. 1 with Rotocloner No. 1	Sugar Refinery
<b>022</b>	Central Dust Collection System No. 2 with Roto-clone (No.2) "B" System	Sugar Refinery
<b>023</b>	Cooler No. 1 with Roto-clone No. 3	Sugar Refinery
<b>024</b>	Cooler No. 2 with Roto-clone No. 4	Sugar Refinery
<b>025</b>	Fluidized Bed Dryer/Cooler with Baghouse	Sugar Refinery
<b>030</b>	Sugar Silos Nos. 1, 2, and 3 (Points #1101-1103)	Transshipment Facility
<b>031</b>	Railcar Sugar Unloading Receiver No. 1	Transshipment Facility
<b>032</b>	Railcar Sugar Unloading Receiver No. 2	Transshipment Facility
<b>034</b>	Bulk Load-Out Operation <i>with baghouse</i>	Sugar Refinery
<b>035</b>	Transfer Bulk Load-Out Station	Sugar Refinery
<b>043</b>	Sugar Refinery Alcohol Usage	Sugar Refinery
<b>045</b>	Powdered Sugar Dryer/Cooler, Packaging Line 8B	Transshipment Facility
<b>046</b>	Powdered Sugar Hopper	Transshipment Facility
<b>047</b>	Sugar Packaging Lines Nos. 12, 13 and 14	Transshipment Facility
<b>048</b>	Paint Booth	Okeelanta Shop
<b>049</b>	Baghouse (currently inactive)	Transshipment
<b>054</b>	"A" System - Wet Roto-clone (No. 6)	Sugar Refinery
<b>055</b>	"C" System - Wet Roto-clone (No. 7)	Sugar Refinery
<b>057</b>	Specialty Sugar Product 300 hp gas-fired package boiler	Refined Sugar Warehouse No. 3
<b>059</b>	Pkg. Lines 16, 17, 18 & 19 with baghouse	Warehouse 3
<b>060</b>	Okeelanta - Reciprocating Internal Combustion Engines (11 total)	Okeelanta Sugar Mill

**ARMS ID No. 0990332 – New Hope Power Company**

<b>EU No.</b>	<b>Emissions Unit Description</b>	<b>Process Area</b>
<b>001</b>	Cogeneration Boiler A	Cogeneration Plant
<b>002</b>	Cogeneration Boiler B	Cogeneration Plant

**SECTION 1. FACILITY INFORMATION**

<b>003</b>	Cogeneration Boiler C	Cogeneration Plant
<b>004</b>	Cogeneration Plant - Material Handling and Storage	Cogeneration Plant
<b>007</b>	Cogeneration Plant - Reciprocating Internal Combustion Engines (5 Engines)	Cogeneration Plant

**Unregulated Emissions Units and/or Activities****ARMS ID No. 0990005 – Okeelanta Corporation**

<b>EU No.</b>	<b>Emissions Unit Description</b>	<b>Process Area</b>
<b>033</b>	Sugar Refinery Miscellaneous Support Equipment	Sugar Refinery
<b>036</b>	Shop Operations	Sugar Mill
<b>037</b>	Sugar Mill Boiler House	Sugar Mill
<b>038</b>	Sugarcane Dumping Area	Sugar Mill
<b>039</b>	Sugarcane Processing Facility	Sugar Mill
<b>040</b>	Fuel Tank Farm	Facility
<b>041</b>	Potable Water System	Facility
<b>042</b>	Sewer Plant	Facility
<b>044</b>	Okeelanta Facility - Miscellaneous Unregulated Activities	Okeelanta Facility
<b>050</b>	Transshipment Facility, Miscellaneous Support Equipment	Transshipment Facility
<b>056</b>	Hi-Vac Industrial Vacuum System	Sugar Refinery

**Unregulated Emissions Units and/or Activities****ARMS ID No. 0990332 – New Hope Power Company**

<b>EU No.</b>	<b>Emissions Unit Description</b>	<b>Process Area</b>
<b>005</b>	Cogeneration Plant - Miscellaneous Support Equipment	Cogeneration Plant

**E. Applicable Regulations**

Based on the Title V air operation permit renewal application received December 4, 2014, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. Summary of applicable regulations is shown in the following table.

<b>Regulation</b>	<b>EU No. 0990005</b>	<b>EU No. 0990332</b>
40 CFR 60, Subpart A, NSPS General Provisions	060	001, 002, 003
40 CFR 63, Subpart A, NESHAP General Provisions	060	007
40 CFR 60, Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978)		001, 002, 003
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	060 stationary engines	007

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**SECTION 1. FACILITY INFORMATION**

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40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	060	007
40 CFR 63, Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters.	057	001, 002, 003
Rule 62-210, F.A.C.	018, 019, 020, 021, 022, 023, 024, 025, 030, 031, 032, 034, 035, 043, 045, 046, 047, 048, 049, 054, 055, 059	001, 002, 003, 004, 007
Rule 62-212, F.A.C.	018, 019, 020, 021, 022, 023, 024, 025, 030, 031, 032, 034, 035, 043, 045, 046, 047, 048, 049, 054, 055, 059	001, 002, 003, 004, 007
Rule 62-213, F.A.C.	018, 019, 020, 021, 022, 023, 024, 025, 030, 031, 032, 034, 035, 043, 045, 046, 047, 048, 049, 054, 055, 059	001, 002, 003, 004, 007
Rule 62-296, F.A.C.	018, 019, 020, 021, 022, 023, 024, 025, 030, 031, 032, 034, 035, 043, 045, 046, 047, 048, 049, 054, 055, 059	001, 002, 003, 004, 007
Rule 62-297, F.A.C.	018, 019, 020, 021, 022, 023, 024, 025, 030, 031, 032, 034, 035, 043, 045, 046, 047, 048, 049, 054, 055, 059	001, 002, 003, 004, 007

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## SECTION 2. FACILITY-WIDE CONDITIONS

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Unless otherwise specified by the permit, the following conditions apply facility-wide to all emission units and activities:

### Permitting and Compliance Authorities

**FW.1. Permitting Authority.** All documents related to applications for permits to operate an emissions unit shall be submitted to the Office of Permitting and Compliance of the Department's Division of Air Resource Management at: 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The telephone number is (850) 717-9000 and the fax number is (850) 717-9097. Copies shall be sent to each agency identified under Compliance Authority.

**FW.2. Compliance Authority.** The permittee shall submit all compliance related notifications and reports required of this permit to the Air Section of the Palm Beach County Health Department at P.O. Box 29, West Palm Beach, Florida 33402-0029. The telephone number is (561) 837-5900 and the fax number is (561) 837-5295. Copies of all such documents shall be submitted to the Air Resources Section of the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33901-2549. The telephone number is (239) 344-5600 and the fax number is (850) 412-0590.

### Permit Appendices

**FW.3. Appendices.** The appendices identified as Section 4 in the Table of Contents are attached as an enforceable part of this permit unless otherwise indicated.

### Annual Reports and Fees

**FW.4. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1<sup>st</sup> of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [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](mailto: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.}*

### Emissions and Controls

**FW.5. Circumvention.** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]



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## SECTION 2. FACILITY-WIDE CONDITIONS

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- FW.6. General VOC and OS Emission Limiting Standards:** The permittee shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered on a facility-wide basis. [Rule 62-296.320(1)(a), F.A.C.]
- FW.7. General Visible Emissions:** Unless otherwise specified by this permit, 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 percent opacity. If the presence of uncombined water is the only reason for failure to meet visible emission standards given in this rule, such failure shall not be a violation of this rule. All visible emissions tests performed pursuant to this rule shall be conducted in accordance with EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. This permit condition does not impose any periodic testing requirement. [Rule 62-296.320(4) (b)1, F.A.C.]
- FW.8. 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. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.; and Permit PSD-FL-333]
- FW.9. Unconfined Particulate Emissions.** The permittee shall take the following reasonable precautions to prevent fugitive particulate matter emissions 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 of fuels, raw materials or products.
- Where practicable, enclose or cover conveyor systems.
  - Minimize drop distances of dry materials when handling.
  - As necessary, provide wind breaks around material handling equipment.
  - Where possible, confine abrasive blasting.
  - As necessary, paving and maintenance of roads, parking areas and yards.
  - As necessary, use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
  - As necessary, provide landscape and/or vegetation.
  - 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.
  - As necessary, apply water or other dust suppressants to control emissions from unpaved roads, yards, and other activities such as road grading, land clearing, and the demolition of buildings.
- [Rules 62-4.070(3) and 62-296.320(4)(c), F.A.C.; 0990005-040-AV Application.]
- FW.10. Definitions:** Unless otherwise specified by permit, startup, shutdown and malfunction are defined as follows.
- Startup:* Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
  - Shutdown:* Shutdown is defined as the cessation of the operation of an emissions unit for any purpose.
  - Malfunction:* A malfunction is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

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## SECTION 2. FACILITY-WIDE CONDITIONS

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[Rule 62-210.200(Definitions), F.A.C.]

**FW.11. Excess Emissions Prohibited.** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations that are based on data collected from continuous emissions monitoring systems (CEMS). [Rule 62-210.700(4), F.A.C.]

**FW.12. Excess Emissions Allowed.** Unless otherwise specified in an emissions unit subsection or Appendices of this permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing:

- a. Best operational practices to minimize emissions are adhered to, and
- b. The duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period.

Rule 62-210.700, F.A.C., cannot vary any federal NSPS or NESHAP provisions. [Rule 62-210.700(1), F.A.C.]

**FW.13. Excess Emissions Notification.** In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. (Plant Operation - Problems). If requested, a full written report on the malfunctions shall be submitted in a quarterly report. [Rule 62-210.700(6), F.A.C.]

**FW.14. Plant Operation – Problems.** If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]

### **Administrative Requirements**

**FW.15. 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 within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2 & 3 and (b), F.A.C.]

**FW.16. Records Retention.** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

**FW.17. Reporting to EPA.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency should be sent to: EPA Region 4 Office; Air, Pesticides & Toxics Management Division; Air and EPCRA Enforcement Branch - Air Enforcement Section; 61 Forsyth Street; Atlanta, Georgia 30303-8960. The telephone number is (404)562-9155 and the fax number is (404) 562-9163.

**FW.18. Prevention of Accidental Releases (Section 112(r) of CAA).** If, and when, the facility becomes subject to 112(r), the permittee shall:

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

## SECTION 2. FACILITY-WIDE CONDITIONS

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- b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Boilers

This subsection addresses the following emissions units.

EU No.	Emissions Unit Description (ARMS ID No. 0990332)
<b>001 002 003</b>	<b>Cogeneration Boilers A (EU-001), B (EU-002) and C (EU-003):</b> Each cogeneration boiler is a steam boiler manufactured by Zurn and designed to produce approximately 506,100 pounds per 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/hr, 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/hr and distillate oil at a heat input rate of 490 MMBtu/hr. Pollution control equipment includes low-NO <sub>x</sub> burners for gas firing, a selective non-catalytic reduction system to reduce nitrogen oxides emissions, and mechanical dust collectors and an electrostatic precipitator to reduce particulate matter emissions. Good operating practices and the efficient combustion of clean, low-sulfur fuels minimizes emissions of CO, SAM, SO <sub>2</sub> , 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.

The following describes the primary applicable requirements for the cogeneration boilers.

*Prevention of Significant Deterioration (PSD) of Air Quality, Rule 212.400, F.A.C.:* Permit No. PSD-FL-196 (as modified) for which the cogeneration boilers were subject to BACT determinations CO, FI, NO<sub>x</sub>, Pb, PM/PM<sub>10</sub>, SAM, SO<sub>2</sub>, and VOC.

*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.

*National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR 63, Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters. [Rule 62-213.440, F.A.C.]*

The cogeneration boilers are classified as “existing, large, biomass, hybrid suspension grate” boilers under 40 CFR 63, Subpart DDDDD.

- *{Permitting Note: 40 CFR 63 Subpart DDDDD applicability to the NHPC cogeneration units is currently subject to reconsideration by US EPA.}*
- *NSPS Provisions in 40 CFR 60, incorporated by reference in Rule 62-204.800, F.A.C., including:* Subpart A (General Provisions); Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978) and NSPS Subpart Ea (Applicability for Standards of Performance for Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or Before September 20, 1994).

*Specific State Regulations:* Rule 62-296.405(2), F.A.C. applies to fossil fuel-fired steam generators with more than 250 MMBtu per hour of heat input. Rule 62-296.410, F.A.C., applies to carbonaceous fuel burning equipment. Rule 62-296.570, F.A.C. applies RACT to major VOC and NO<sub>x</sub> emitting facilities.

*Compliance Assurance Monitoring (CAM):* Rule 62-213.440(1)(b), F.A.C. applies to the particulate matter standards for the cogeneration boilers.

*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

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Boilers

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.

#### Equipment Specifications

**A.1. Production Capacity.** The cogeneration plant includes a nominal 75 MW steam turbine electrical generator and a nominal 65 MW steam turbine electrical generator. *{Permitting Note: The cogeneration plant has a nominal generating capacity of 140 MW. Therefore, the facility is subject to the power plant site certification requirements of the Department. Subsequent modifications must be made in accordance with appropriate site certification requirements.}* [Permit No. PSD-FL-196P; Rule 62-4.070(3), F.A.C.]

**A.2. Boiler Design.** The cogeneration boilers are units designed to fire biomass as the primary fuel with pipeline natural gas and distillate oil as auxiliary fuels. Natural gas and distillate oil are fired at startup and shutdown, when necessary to ensure good combustion, to supplement biomass fuel, and for periods when the biomass fuel supply is interrupted. No other fuels are authorized. *{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.}*

[Permit No. PSD-FL-196P; Rule 62-4.070(3), F.A.C.]

**A.3. Stack.** Each cogeneration boiler has an individual stack that is 199 feet tall. The permanent stack sampling facilities for each stack shall comply with Rule 62-297.310, F.A.C. [Permit No. PSD-FL-196P; Rules 62-4.070(3) and 62-297.310, F.A.C.]

**A.4. Process Monitors.** Each cogeneration boiler is equipped with instruments to measure the fuel feed rate, heat input, steam production, steam pressure, and steam temperature. [Permit No. PSD-FL-196P; Rule 62-4.070(3), F.A.C.]

**A.5. Control Equipment.** Each cogeneration boiler is equipped with:

- a. Low-NO<sub>x</sub> natural gas burners rated for no more than 0.15 lb of NO<sub>x</sub> 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 per hour.
- b. 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 electrostatic precipitator and designed for a removal efficiency of at least 85 percent of the particulate matter greater than 10 microns in size (assuming a specific gravity of 2.00).
- c. An electrostatic precipitator designed for at least 98 percent removal of particulate matter.
- d. A selective non-catalytic reduction system designed for at least 40 percent removal of NO<sub>x</sub>.

The permittee shall abide by the O&M plans for the cogeneration plant control equipment specified in Appendix OM of this permit. [Permit Nos. PSD-FL-196M and PSD-FL-196Q; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

**A.6. Good Combustion Practices.** The boiler operators shall follow the procedures for “good combustion practices” identified in Appendix GC of this permit. [Permit No. PSD-FL-196P]

**A.7. Continuous Monitors.** For each cogeneration boiler, the permittee shall install, calibrate, maintain, and operate a COMS to continuously measure and record opacity and CEMS to continuously measure and record emissions of CO, NO<sub>x</sub>, CO<sub>2</sub>, and SO<sub>2</sub> in a manner sufficient to demonstrate compliance with the standards of this permit. The opacity monitor shall be placed in the ductwork between the electrostatic precipitator and the stack or in the stack. [Permit No. PSD-FL-196P; NSPS Subpart Da; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Boilers

- A.8. 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. [Permit No. PSD-FL-196P; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

#### **Capacity, Fuels and Performance Restrictions**

- A.9. Permitted Capacity.** The maximum heat input rate to each cogeneration boiler shall not exceed 760 MMBtu/hr when burning 100 percent biomass, 400 MMBtu/hr when burning 100 percent natural gas, and 490 MMBtu/hr when burning 100 percent distillate oil. The steam production rate of each boiler shall not exceed an average of 506,100 pounds per hour at 1,500 psig and 975°F. The operating hours of the cogeneration boilers are not restricted (8760 hours per year). [Permit No. PSD-FL-196P; Rules 62-4.070(3), Rule 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.]

- A.10. Primary Fuel.** The primary fuel for the plant shall be biomass, which shall consist of 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. The biomass fuel used at the cogeneration plant shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The fuel used at the cogeneration plant shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The permittee shall perform a daily visual inspection of any wood material or similar vegetative matter that has been delivered to the plant for use as fuel. Any shipment observed to contain prohibited materials shall not be used as fuel, unless such materials can be readily segregated and removed from the wood material and vegetative matter. The permittee shall abide by the Ash and Fuel Management Plans specified in Appendices AM and FM of this permit. [Permit No. PSD-FL-196P; Rules 62-4.070(3), Rule 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.]

- A.11. Auxiliary Fuel.** The cogeneration boilers shall fire only distillate oil and natural gas as auxiliary fuels. The maximum sulfur content of distillate oil is limited to 0.05 percent by weight. In addition to the primary authorized fuels, each boiler may startup on natural gas or distillate oil. The firing of all fossil fuels (distillate oil and natural gas) shall be less than 25 percent of the total heat input to each cogeneration boiler during any calendar quarter. The permittee shall abide by the Ash and Fuel Management Plans specified in Appendices AM and FM of this permit. [Permit No. PSD-FL-196P; Rules 62-4.070(3), Rule 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.]

- A.12. Fuel Management Plan.** The permittee shall abide by the Fuel Management Plan specified in Appendix FM. [Permit No. PSD-FL-196Q; 0990332-022-AC, Specific Condition 1.]

#### **Emission Limiting Standards**

- A.13. 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 standards specified in the following table:

Pollutant	Averaging Period	Emissions Standards per Boiler <sup>i</sup>	
		lb/MMBtu	lb/hr
Carbon Monoxide <sup>a</sup>	30-day rolling CEMS avg.	0.50	380.0
	12-month rolling CEMS avg.	0.35	
Nitrogen Oxides <sup>b</sup>	30-day rolling CEMS avg.	0.15	114.0
Sulfur Dioxide <sup>c</sup>	24-hour rolling CEMS avg.	0.20	152.0
	30-day rolling CEMS avg.	0.10	

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Boilers

Pollutant	Averaging Period	Emissions Standards per Boiler <sup>i</sup>	
		lb/MMBtu	lb/hr
	12-month rolling CEMS avg.	0.06	
Stack Opacity <sup>d</sup>	6-minute block average by COMS and EPA Method 9	≤ 20% opacity, except for one 6-minute block per hour ≤ 27% opacity	
Particulate Matter <sup>e</sup>	3-run test avg.	0.026	19.8
Volatile Organic Compounds <sup>f</sup>	3-run test avg.	0.05	38.0
Mercury <sup>g</sup>	3-run test avg.	5.4 x 10 <sup>-06</sup>	NA
Lead and Fluorides <sup>h</sup>	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.		

- a. 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<sub>x</sub> monitoring requirements below. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period.
- b. Compliance shall be determined by data collected from the required NO<sub>x</sub> 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, 60.46a, 60.47a, 60.48a, and 60.49a. A boiler-operating day is any day in which any authorized fuel is fired. Each cogeneration boiler is also subject to Rule 62-296.405(2)(d), F.A.C. and 40 CFR 60.44a, which limits NO<sub>x</sub> emissions to 0.20 lb/MMBtu for gaseous fuels, 0.30 lb/MMBtu for liquid fuels, and 0.60 lb/MMBtu for solid fuels. Compliance with the BACT standard ensures compliance with these standards.
- c. Compliance with the SO<sub>2</sub> standards shall be determined by data collected from the required SO<sub>2</sub> 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, 60.46a, 60.47a, 60.48a, and 60.49a. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period. Valid SO<sub>2</sub> hourly averages shall not be excluded from any compliance average. Each cogeneration boiler is also subject to Rule 62-296.405(2)(c), F.A.C. and 40 CFR 60.43a(d)(2), which limits SO<sub>2</sub> emissions to 1.20 lb/MMBtu for solid fuels and 0.20 lb/MMBtu for liquid or gaseous fuels. Compliance with the BACT standard ensures compliance with these standards. *{Permitting Note: Potential emissions of sulfuric acid mist are minimized by the effective control of SO<sub>2</sub> emissions with the firing of low sulfur fuels. For reporting purposes, sulfuric acid mist emissions shall be estimated as 6 percent of the total measured SO<sub>2</sub> emissions.}*
- d. 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. Each cogeneration boiler is also subject to Rule 62-296.405(2)(a), F.A.C. and 40 CFR 60.42a, which limits visible emissions to no more than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Boilers

opacity. Compliance with the BACT standard ensures compliance with these standards.

- e. Compliance with the particulate matter standards shall be determined by the average of three test runs conducted in accordance with EPA Method 5. For purposes of reporting PM<sub>10</sub> emissions, it shall be assumed that all particulate matter emitted is PM<sub>10</sub>. Each cogeneration boiler is also subject to Rule 62-296.405(2)(b), F.A.C. and 40 CFR 60.42a, which limits particulate matter emissions to 0.03 lb/MMBtu. Compliance with the BACT standard ensures compliance with these standards.
- f. 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 “volatile organic compounds”.
- g. Compliance with the mercury standards shall be determined by the average of three test runs conducted in accordance with EPA Method 101A or 29. 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 pounds per 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. The particulate matter standard is also a surrogate standard for lead emissions. *{Permitting Note: For reporting purposes, average lead emissions are expected to be  $2.6 \times 10^{-05}$  lb/MMBtu and average fluoride emissions are expected to be  $1.9 \times 10^{-04}$  lb/MMBtu when firing bagasse/wood.}*
- i. Each boiler shall comply with the standards when firing any combination of authorized fuels. The “lb/hour” rates are based on the highest emission standard shown for that pollutant. Required compliance tests shall be performed in accordance with the requirements of Condition No. 19 and Appendix CT.

[Permit Nos. PSD-FL-196P and PSD-FL-196Q; Rules 62-4.070(3), Rule 62-210.200 (PTE), and 62-212.400 (BACT), F.A.C.]

#### A.13.1. Emission Limits under 40 CFR 63, Subpart DDDDD.

Mercury (Hg) Lb/MMBtu of heat input	Hydrogen Chloride (HCl) Lb/MMBtu of heat input	Carbon Monoxide (CO) ppmvd@3% Oxygen	Particulate Matter (PM) Lb/MMBtu of heat input <b>or</b> Total Selected Metals <sup>b</sup> (TSM) Lb/MMBtu of heat input
$5.7 \times 10^{-6}$	0.022	2,800 (stack test) <sup>c</sup> <b>or</b> 900 <sup>a</sup> (CEMS – 30 day rolling average)	0.44 <b>or</b> 0.00045

<sup>a</sup> To demonstrate compliance with the applicable alternative CO CEMS emission standard, the permittee must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer.

<sup>b</sup> *Total selected metals (TSM)* means the sum of the following metallic hazardous air pollutants: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Boilers

<sup>c</sup> EPA has proposed to revise this limit to 3,500 ppmvd.  
[40 CFR 63.7500; Table 2.]

**A.14. Rule 62-296.405(2), F.A.C.** The cogeneration boilers are considered “Fossil Fuel Steam Generators with More Than 250 Million Btu per Hour Heat Input” and are subject to the following requirements for new units.

- (a) Visible Emissions – (See subsection 62-204.800(7), F.A.C., and 40 C.F.R. 60.42 and 60.42a).
- (b) Particulate Matter – (See subsection 62-204.800(7), F.A.C., and 40 C.F.R. 60.42 and 60.42a).
- (c) Sulfur Dioxide – (See subsection 62-204.800(7), F.A.C., and 40 C.F.R. 60.43 and 60.43a).
- (d) Nitrogen Oxides – (See subsection 62-204.800(7), F.A.C., and 40 C.F.R. 60.44 and 60.44a).

The units were constructed in accordance with NSPS Subpart Da for Electric Utility Steam Generating Units. These provisions are included in Appendix 60Da of Section 4 of this permit.

**A.15. Rule 62-296.410, F.A.C.** The cogeneration boilers are considered “Carbonaceous Fuel Burning Equipment” and are subject to the following requirements for new units with a maximum heat input rate equal to or greater than 30 MMBtu per hour.

- a. Visible Emissions – 30 percent opacity except that a density of 40 percent opacity is permissible for not more than two minutes in any one hour.
- b. Particulate Matter – 0.2 lb/MMBtu of heat input of carbonaceous fuel plus 0.1 lb/MMBtu of heat input of fossil fuel.

**A.16. Rule 62-296.570, F.A.C.** The cogeneration boilers operate in Palm Beach County and are subject to the Reasonably Available Control Technology (RACT) Requirements for Major VOC- and NO<sub>x</sub>-Emitting Facilities. Emissions of VOC and NO<sub>x</sub> from carbonaceous fuel burning facilities, other than waste-to-energy facilities, shall not exceed 5.0 lb/MMBtu and 0.9 lb/MMBtu, respectively.

#### **Startup, Shutdown, and Malfunction**

**A.17. Startup, Shutdown, and Malfunction Requirements.** The permittee shall comply with the following requirements regarding periods of startup, shutdown, and malfunction for each cogeneration boiler.

- a. *Definitions*
  - 1) Excess emissions are emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions that occur during startup, shutdown, or malfunction.
  - 2) Startup is the commencement of operation of a boiler which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which may result in excess emissions. Periods of startup for each boiler shall end once steam generation reaches 150,000 pounds per hour. A cold startup is a startup after the boiler has been shutdown for 24 hours or more. A warm startup is a startup after the boiler has been shutdown for less than 24 hours.
  - 3) Shutdown is the cessation of the operation of a boiler for any purpose after steam generation drops below 150,000 pounds per hour.
  - 4) Malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- b. *Prohibition:* 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. Emissions data recorded during such preventable periods shall be included in the compliance averages. [Rule 62-210.700(4), F.A.C.]
- c. *Monitoring Data Exclusion:* Each continuous monitoring system shall operate and record data during all

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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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 (5), F.A.C., these conditions consider the variations in operation of the cogeneration boilers.

- 1) Natural gas or distillate oil shall be fired during startup prior to energizing the electrostatic precipitator (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.
  - 2) Hourly CO and NO<sub>x</sub> 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<sub>x</sub>) shall be excluded in a 24-hour period due to a cold startup. No more than three hourly emission rate values (CO or NO<sub>x</sub>) shall be excluded in a 24-hour period due to a warm startup. No more than two hourly emission rate values (CO or NO<sub>x</sub>) shall be excluded in a 24-hour period due to a malfunction. No more than two hourly emission rate values (CO or NO<sub>x</sub>) 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.
  - 3) All valid hourly SO<sub>2</sub> emission rate values shall be included in all of the compliance averages. [40 CFR 60.46a and 60.49a]
  - 4) To "document" a malfunction, the operator shall notify the Compliance Authority within one working day of the malfunction by phone, facsimile, or electronic mail. The notification shall include the date and time of malfunction, a description of the malfunction and probable cause, steps taken to minimize emissions, and actions taken to correct the problem. [Rules 62-210.700(6) and 62-4.130, F.A.C.]
- d. *Reporting:* In conjunction with the annual operating report, the permittee shall identify the number of startups, the number of shutdowns, and the number of malfunctions that occurred during the year for each boiler. For each boiler's CO and NO<sub>x</sub> monitors, the report shall identify the annual hours of emission data excluded from the compliance determination due to each type of incident (startups, shutdowns and documented malfunctions).

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

[Permit No. PSD-FL-196P; Rules 62-4.070(3), 62-210.200, and 62-210.700, F.A.C.; 40 CFR 60.8; and 40 CFR 60.46a]

**A.18. Startup/Shutdown Plan.** The following procedures will be used to minimize the magnitude and duration of emissions during startup and shutdown.

a. *Startup Procedures.*

- 1) The ESP air flushing system and heater are placed in service at least eight hours prior to boiler light off.
- 2) The boiler is started up on natural gas or distillate oil prior to energizing the ESP.
- 3) 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.

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- 4) Manual controls are used to ensure optimum air-to-fuel ratios during the startup period.
  - 5) The startup fuel is reduced gradually while the biomass firing rate is increased.
- b. *Shutdown Procedures.*
- 1) Manual controls are employed to ensure optimum air-to-fuel ratios during the shutdown period.
  - 2) For shutdown, the ESP is not deactivated until the fuel feed to the furnace is stopped.

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#### **Testing**

##### **A.19. Stack Testing Requirements**

- a. *Initial Tests:* Initial tests were initially required for emissions of mercury, particulate matter, and volatile organic compounds. The Department may require these initial tests 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.
- b. *Annual Tests:* At least once during each federal fiscal year, the permittee shall conduct compliance tests for emissions of mercury, particulate matter, and volatile organic compounds.
- c. *Renewal Tests:* Within the 12-month period prior to submitting an application to renew the Title V air operation permit, the permittee shall conduct compliance tests for emissions of mercury, particulate matter, and volatile organic compounds.
- d. *Test Procedures:* The emission compliance tests shall be conducted in accordance with the provisions of Chapter 62-297, F.A.C., 40 CFR 60.46a (NSPS Subpart Da), and as summarized in Appendix CT of this permit. The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. The biomass fuel feed for each test run shall consist of at least 45 percent wood materials by weight. Testing of emissions 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 100 percent biomass. 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 percent 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, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(7)(a)9, F.A.C. and 40 CFR 60.7, 60.8]
- e. *Test Methods:* As necessary, compliance with the emission limits specified in this permit shall be demonstrated using the following EPA Methods (or most recent versions), as contained in 40 CFR Parts 60 and 61.

EPA Method	Description
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits
3A	Gas analysis when needed for calculation of molecular weight or percent O <sub>2</sub>
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits
5	Particulate matter emissions

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EPA Method	Description
6 or 6C	Sulfur dioxide emissions
7 or 7E	Nitrogen oxide emissions
9	Visible emissions determination of opacity <i>{Permitting Note: Although each unit is required to monitor opacity with a COMS, visible observations may also be used to demonstrate compliance.}</i>
10	Carbon monoxide emissions
12	Inorganic lead emissions
19	Calculation of sulfur dioxide and nitrogen oxide emission rates
25A	Volatile organic compounds emissions <i>{Permitting Note: EPA Method 18 may be conducted 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 "volatile organic compounds".}</i>
29	Multiple metals emissions
30B	Determination of Total Vapor Phase Mercury
101A	Particulate and gaseous mercury emissions

No other methods may be used to demonstrate compliance unless prior written approval is received from the Department. Other applicable testing requirements are included in Appendix CT of this permit. The permittee shall use CEMS and COMS data to demonstrate compliance with the emissions standards for CO, NO<sub>x</sub>, SO<sub>2</sub> and opacity. [Permit No. PSD-FL-196P; Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]

#### **Monitoring**

**A.20. CEMS and COMS.** For each cogeneration boiler, the permittee shall calibrate, maintain, and operate a COMS to continuously measure and record opacity and CEMS to continuously measure and record emissions of CO, NO<sub>x</sub>, CO<sub>2</sub> (for O<sub>2</sub>), and SO<sub>2</sub> in a manner sufficient to demonstrate compliance with the standards of this permit.

- a. *Performance Specifications.* 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. Each CEMS and COMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements.
  - 1) Opacity shall comply with Performance Specification 1 in Appendix B of 40 CFR 60.
  - 2) The NO<sub>x</sub> and SO<sub>2</sub> CEMS shall comply with Performance Specification 2 in Appendix B of 40 CFR 60. The SO<sub>2</sub> reference method for the annual RATA shall be EPA Method 6 (or 6C) in Appendix A of 40 CFR 60. The NO<sub>x</sub> reference method for the annual RATA shall be EPA Method 7 (or 7E) in Appendix A of 40 CFR 60.
  - 3) The CO<sub>2</sub> CEMS shall comply with Performance Specification 3 in Appendix B of 40 CFR 60. The CO<sub>2</sub> 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.
- b. *Data Collection.* Each CEMS and COMS shall record emissions data at all times including episodes of startup, shutdown, and malfunction. Emissions data recorded during periods of startup, shutdown, or

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Boilers

malfunction may only be excluded from the compliance averages in accordance with the requirements specified in Condition 17 of this subsection. To the extent practicable, the permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions.

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<sub>x</sub>, and SO<sub>2</sub> CEMS shall express the 1-hour emission averages in terms of "lb/MMBtu of heat input". The CO<sub>2</sub> CEMS shall express the 1-hour emission average (CO<sub>2</sub>) 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<sub>x</sub> and SO<sub>2</sub> 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.

- c. *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.
- d. *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.
- e. *Other Applicable Requirements:* Each CEMS shall comply with the following applicable requirements Rules 62-204.800 (Federal Rule Adopted by Reference) and 62-297.520, F.A.C. (Continuous Monitor Performance Specifications); 40 CFR 60.13 (Subpart A - Monitoring Requirements); 40 CFR 60.47a (Subpart Da - Emissions Monitoring); 40 CFR 60.48a (Subpart Da - Compliance Determination Procedures and Methods); 60.49a (Subpart Da - Reporting Requirements).

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

**A.21. Process and Control Parameters.** The permittee shall install, 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<sub>x</sub> emissions data

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### A. Cogeneration Boilers

recorded by the CEMS. The permittee shall identify minimum urea injection rates for various load conditions that ensure compliance with the NO<sub>x</sub> standards. Should the NO<sub>x</sub> 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. [Permit No. PSD-FL-196P and PSD-FL-196Q; Rules 62-4.070 and 62-212.400 (BACT), F.A.C.]

- A.22. Power Generation.** In conjunction with the Annual Operating Report, 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.]

#### **Recordkeeping and Reporting**

- A.23. 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 SO<sub>2</sub> emissions and the 12-month rolling total SO<sub>2</sub> 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. [Permit No. PSD-FL-196P; Rules 62-4.070 and 62-212.400 (BACT), F.A.C.]

- A.24. Quarterly Reports.** For each cogeneration boiler, the permittee shall submit a quarterly report for each required continuous emissions and opacity monitoring system in accordance with the requirements specified in the “Quarterly Report” included 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. [Permit No. PSD-FL-196P; Rules 62-4.070 and 62-212.400 (BACT), F.A.C.]

#### **Other Applicable Requirements**

- A.25. NSPS Provisions.** In accordance with Rule 62-204.800(8), F.A.C., the cogeneration boilers are subject to the applicable requirements of 40 CFR 60, including: Subpart A (General Provisions), Subpart Da (Standards of Performance for Electric Utility Steam Generating Units), Subpart DDDD, Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units, and NSPS Subpart Ea (Applicability for Standards of Performance for Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or Before September 20, 1994), and Subpart Ea (Applicability for Municipal Waste Combustors). The applicable provisions are specified in Appendices 60A, 60Da, 60DDDD, and 60Ea in Section 4 of this permit.
- A.26. CAM Plan.** Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., and 40 CFR 64, the cogeneration boilers shall comply with the CAM plan specified in Appendix CM in Section 4 of this permit.
- A.27. Subpart DDDDD Applicability.** The cogeneration boilers are subject to the applicable provisions for existing units of NESHAP Subpart DDDDD in 40 CFR 63 for Industrial, Commercial, and Institutional Boilers and Process Heaters for major sources of HAP. The compliance date for existing boilers is January 31, 2016. The applicable requirements are contained in Appendix 63, Subpart DDDDD in Section 4 of this permit. [NESHAP 40 CFR 63, Subpart DDDDD and permit No. PSD-FL-196Q]

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*{Permitting Note: 40 CFR 63 Subpart DDDDD applicability is currently under review by US EPA.}*

#### **General Compliance Requirements**

Note: The requirements in Specific Conditions **A.28.** through **A.52.** are not effective until January 31, 2016, except for certain notification requirements.

**A.28. Compliance with Emission Limits.** The permittee must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. [40 CFR 63.7505]

**A.29. Site-Specific Plans.** If the permittee demonstrates compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS), or with a CEMS, or COMS, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of 40 CFR 63.7505 for the use of any CEMS, COMS, or CPMS. This requirement also applies if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f). The permittee must also develop a site-specific stack test plan according to the requirements in 63.7520(a) and 63.7(c). If the permittee demonstrates compliance with any applicable emission limit through fuel analysis, the permittee must develop a site-specific fuel monitoring plan according to the requirements in paragraph (b) of 40 CFR 63.7521. [40 CFR 63.7505 and 63.7521]

#### **Compliance Requirements**

**A.30. Initial Compliance.** For each boiler that is required or the permittee elects to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of 40 CFR 63, Subpart DDDDD through performance testing, the permittee's initial compliance requirements include all the following:

- Conduct performance tests according to 40 CFR 63.7520 and Table 5 of 40 CFR 63, Subpart DDDDD.
- Conduct fuel analysis according to 40 CFR 63.7521 and Table 6 of 40 CFR 63, Subpart DDDDD.
- Establish operating limits according to §63.7530 and Table 7 to this subpart.
- Conduct CMS performance evaluations according to §63.7525.

For each boiler that is required or the permittee elects to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of 40 CFR 63, Subpart DDDDD through fuel analysis, the permittee's initial compliance requirements include all the following:

- Conduct fuel analysis according to 40 CFR 63.7521 and Table 6 of 40 CFR 63, Subpart DDDDD.
- Determine the concentration of pollutants in the fuel according to the procedures in Table 6 of 40 CFR 63, Subpart DDDDD.
- Follow the procedures in 40 CFR 63.7530(c) to demonstrate compliance.

For each boiler that is subject to a carbon monoxide (CO) limit, conduct a performance evaluation of the continuous CO monitor according to 40 CFR 63.7525(a).

For existing affected sources, complete the initial compliance demonstration no later than 180 days after the compliance date.

[40 CFR 63.7510]

**A.31. Subsequent Performance Tests.**

- The permittee must conduct all applicable performance tests according to 40 CFR 63.7520 on an annual basis, except as specified below in this specific condition. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified below.

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- If the performance tests for a given pollutant for at least 2 consecutive years show that the emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year.
- If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level.
- Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up.
- For pollutants for which compliance is demonstrated by fuel analysis, conduct a monthly fuel analysis according to 63.7521 and 63.7515(e). If each of 12 consecutive monthly fuel analysis demonstrates 75 percent or less of the compliance level, the fuel analysis frequency may be decreased to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or the permittee begins to burn a new type of fuel, the permittee shall return to monthly monitoring for that fuel, until 12 months of fuel analysis are again less than 75 percent of the compliance level.

[40 CFR 63.7515]

#### A.32. Stack Tests and Procedures.

(a) The permittee must conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The permittee must also develop a site-specific stack test plan according to the requirements in 40 CFR 63.7(c). The permittee shall conduct all performance tests under such conditions as the Administrator specifies based on the representative performance of each boiler or process heater for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.

(b) The permittee must conduct each performance test according to the requirements in Table 5 to 40 CFR 63, Subpart DDDDD.

(c) The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 to Subpart DDDDD. The permittee must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the permittee must comply with the operating limit for operating load conditions specified in Table 4 to Subpart DDDDD.

(d) The permittee must conduct a minimum of three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1 and 2 or 11 through 13 to Subpart DDDDD.

(e) To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A-7 to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates.

(f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.



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### A. Cogeneration Boilers

[40 CFR 63.7520]

- A.33. Fuel Analysis and Procedures.** The permittee shall conduct fuel analysis according to 40 CFR 63.7521(a), (b), (c), (d), and (e).
- A.34. Monitoring.** The permittee shall comply with the applicable monitoring requirements in 40 CFR 63.7525 and 63.7535.
- A.35. Continuous Compliance.** The permittee must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to 40 CFR 63, Subpart DDDDD, the work practice standards in Table 3 to Subpart DDDDD, and the operating limits in Table 4 to Subpart DDDDD that applies to the permittee according to the methods specified in Table 8 to Subpart DDDDD and paragraphs (a)(1) through (19) of 40 CFR 63.7540. [40 CFR 63.7540]
- A.36. Operating Practices.** At all times, the permittee shall operate and maintain the steam boiler, 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 Administrator (Department) that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

#### **Tune-Ups**

- A.37. Tune-Ups.** To demonstrate continuous compliance, the permittee shall conduct a tune-up of the boiler annually as specified in 40 CFR 63.7540. 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 and Table 3.]

- A.38. Details of Tune-Ups.**

The permittee shall:

- Inspect the burner, as applicable, and clean or replace any components of the burner as necessary (the burner inspection may be delayed 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. 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;
- 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;
- Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee 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;
- Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject;
- 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
- Maintain on-site and submit, if requested by the Administrator (Department), an annual report containing the following information:

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- 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;
- A description of any corrective actions taken as a part of the tune-up; and
- 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.

[40 CFR 63.7540]

### Energy Assessment

**A.39. Energy Assessment.** The permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements specified below, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in 40 CFR 63.7575:

- a. A visual inspection of the boiler or process heater system.
- b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
- f. A list of cost-effective energy conservation measures that are within the facility's control.
- g. A list of the energy savings potential of the energy conservation measures identified.
- h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements,

[40 CFR 63.7500; Table 3.]

### Operational Practices

**A.40. Startup.** The permittee must operate all CMS during startup.

- For startup of a boiler or process heater, the permittee must use one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, and liquefied petroleum gas.
- If the permittee starts firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases, the permittee must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, selective non-catalytic reduction (SNCR), and selective catalytic reduction (SCR). The permittee must start the limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Boilers

- The permittee must comply with all applicable emission limits at all times except for startup or shutdown periods conforming with this work practice. The permittee must collect monitoring data during periods of startup, as specified in §63.7535(b). The permittee must keep records during periods of startup. The permittee must provide reports concerning activities and periods of startup, as specified in 40 CFR 63.7555.

[40 CFR 63.7500; Table 3.]

**A.41. Shutdown.** The permittee must operate all CMS during shutdown.

- While firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices, except limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR.
- The permittee must comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice. The permittee must collect monitoring data during periods of shutdown, as specified in 40 CFR 63.7535(b). The permittee must keep records during periods of shutdown. The permittee must provide reports concerning activities and periods of shutdown, as specified in §63.7555.

[40 CFR 63.7500; Table 3.]

### **Notifications**

**A.42. Performance Tests.** If the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 CFR 63.7545]

**A.43. Changes in Subcategory.** If the permittee switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice to the Department of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:

- The name of the owner or operator of the affected source, the location of the source, the boilers that have switched fuels, were physically changed, and the date of the notice.
- The currently applicable subcategory under 40 CFR 63, Subpart DDDDD.
- The date upon which the fuel switch or physical change occurred.

[40 CFR 63.7545]

### **Reports**

**A.44. Compliance Reports Schedule.** The permittee shall submit to the Department a semiannual compliance report as specified below:

- The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days after the compliance date.
- The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495.
- Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- Each subsequent compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

[40 CFR 63.7550]

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**A.45. Compliance Reports.** A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

- (a)(1) If the facility is subject to a the requirements of a tune up they must submit a compliance report with the information in paragraphs (a)(5)(i) through (iv) and (xiv) of this condition.
- (2) If a facility is complying with the fuel analysis they must submit a compliance report with the information in paragraphs (a)(5)(i) through (iv), (vi), (x), (xi), (xiii), (xv) and paragraph (b) of this condition.
- (3) If a facility is complying with the applicable emissions limit with performance testing they must submit a compliance report with the information in (a)(5)(i) through (iv), (vi), (vii), (ix), (xi), (xiii), (xv) and paragraph (b) of this condition.
- (4) If a facility is complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (a)(5)(i) through (vi), (xi), (xiii), (xv) through (xvii), and paragraph (c) of this condition.
- (5)(i) Company and Facility name and address.
- (ii) Process unit information, emissions limitations, and operating parameter limitations.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) The total operating time during the reporting period.
- (v) If the permittee uses a CMS, including CEMS, COMS, or CPMS, the permittee must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit.
- (vi) The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
- (vii) If the permittee is conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.
- (viii) A statement indicating that the permittee burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if the permittee did burn a new type of fuel and are subject to a HCl emission limit, the permittee must submit the calculation of chlorine input, using Equation 7 of §63.7530, that demonstrates that the source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or the permittee must submit the calculation of HCl emission rate using Equation 12 of §63.7530 that demonstrates that the source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If the permittee burned a new type of fuel and are subject to a mercury emission limit, the permittee must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that the source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or the permittee must submit the calculation of mercury emission rate using Equation 13 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If the permittee burned a new type of fuel and are subject to a TSM emission limit, the permittee must submit the calculation of TSM input, using Equation 9 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or the permittee must submit the calculation of TSM emission rate, using Equation 14 of §63.7530, that demonstrates that the source is still

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### A. Cogeneration Boilers

meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(ix) If the permittee wishes to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and the permittee cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530 the permittee must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(x) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to §§63.7521(f) and 63.7530(g).

(xi) If there are no deviations from any emission limits or operating limits in Subpart DDDDD that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(xii) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(xiii) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xv) If the permittee plans to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(xvi) For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values based on the daily CEMS (CO and mercury) and CPMS (PM CPMS output, scrubber pH, scrubber liquid flow rate, scrubber pressure drop) data.

(xvii) 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.

(b) For each deviation from an emission limit or operating limit in Subpart DDDDD that occurs at an individual boiler or process heater where the permittee is not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (b)(1) through (3) of Subpart DDDDD.

(1) A description of the deviation and which emission limit or operating limit from which the permittee deviated.

(2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Boilers

(c) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an individual boiler or process heater where the permittee is using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (c)(1) through (9) of this condition. This includes any deviations from the site-specific monitoring plan as required in §63.7505(b).

- (1) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what you deviated from).
- (2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).
- (4) The date and time that each deviation started and stopped.
- (5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
- (6) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
- (8) A brief description of the source for which there was a deviation.
- (9) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

[40 CFR 63.7550 and Table 9.]

**A.46. Performance Test Reports.** The permittee must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 of 40 CFR 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550. [40 CFR 63.7515]

**A.47. RATA Data.** Within 60 days after the date of completing each CEMS performance evaluation test (defined in 63.2) you must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in Specific Condition **A.46**. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator. [40 CFR 63.7550]

**A.48. Electronic Submission.** The permittee shall submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee shall also submit these reports to the Administrator in the format specified by the Administrator. [40 CFR 63.7550]

### **Records**

**A.49. Recordkeeping.** The permittee shall keep the following records: A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report. The permittee shall also meet all applicable recordkeeping requirements contained in 40 CFR 63.7555(b), (c) and (d). [40 CFR 63.7555]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Boilers

**A.50. Startup and Shutdown.** The permittee shall maintain records of the calendar date, time, occurrence and duration of each startup and shutdown and of the types and amounts of fuels used during each startup and shutdown. [40 CFR 63.7555]

**A.51. Form and Duration.** The permittee's records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

- As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- The permittee shall keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). Records can be kept off site for the remaining 3 years.

[40 CFR 63.7560]

#### **Applicability of General Provisions to Subpart DDDDD**

**A.52. General Provisions.** As stated in 40 CFR 63.7565, the permittee shall comply with the applicable General Provisions according to the following:

Citation	Subject	Applies to Subpart DDDDD
§63.9	Notification Requirements	Yes.
§63.10(a), (b)(1)	Recordkeeping and Reporting Requirements	Yes.
§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes.

[40 CFR 63.7565; Table 10]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**  
**B. Material Handling and Storage Operations - Cogeneration Plant**

This subsection addresses the following emissions units.

EU No.	Emissions Unit Description
004	<b>Cogeneration Plant - Material Handling and Storage</b> includes unloading operations, stockpiles, transfer operations, conveyors, screens, crushers, hoppers and silos.

The materials handling and storage operations include authorization for truck and railcar unloading operations, storage piles, transfer operations, conveyors, screens, crushers, hoppers and silos. The materials authorized to be handled and stored include bagasse, authorized wood, fly ash, 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.

**EQUIPMENT SPECIFICATIONS**

**B.1. Equipment.** 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 federal fiscal 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.

[Permit No. 0990332-020-AC (PSD-FL-196Q) Condition 17.(c.); Rules 62-4.160(2), 62-210.200 (Definitions), and 62-210.300, F.A.C.]

**B.2. 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 design information.



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. Material Handling and Storage Operations - Cogeneration Plan

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.}* [Permit No. PSD-FL-196P; Permit No. PSD-FL-196Q; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

**B.3. Ash and Fuel Management Plans.** The permittee shall abide by the Ash and Fuel Management Plans specified in Appendix AM and FM, respectively. [Permit No. PSD-FL-196P]

**B.4. 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. [Permit No. PSD-FL-196P; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

#### **Performance Restrictions**

**B.5. Hours of Operation.** The permittee is authorized to operate the materials handling and storage operations continuously (8760 hours per year). [Rule 62-210.200 (PTE), F.A.C.]

#### **Emission Limiting Standards**

**B.6. Baghouse Vents.** As determined by EPA Method 9, visible emissions from each baghouse vent shall not exceed 5 percent opacity. [Permit No. PSD-FL-196P; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

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

- a. Except for those associated with the stacker/reclaimer, all conveyors and conveyor transfer points shall be enclosed to prevent fugitive particulate matter emissions.
- b. 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.
- c. 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.
- d. The distance that biomass fuel is dropped during handling shall be minimized.
- e. Windbreaks around the material handling equipment shall be used as necessary.
- f. Maintenance of paved areas as needed.

[Permit No. PSD-FL-196P; Rules 62-4.070(3), 62-296.320(4)(c), and 62-212.400 (BACT), F.A.C.]

#### **Test Requirements**

**B.8. Baghouse Vents.** At least once during each federal fiscal year (October 1<sup>st</sup> through September 30<sup>th</sup>), 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 federal fiscal 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 federal fiscal 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 CT of this permit. The minimum observation period for an opacity test shall be 30 minutes. [Permit Nos. PSD-FL-196P and PSD-FL-196Q; Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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#### **B. Material Handling and Storage Operations - Cogeneration Plan**

**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(8), F.A.C. as summarized in Appendix CT of this permit. [Rules 62-297.310(8), F.A.C.]

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**SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS**

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**Subsection C. Reciprocating Internal Combustion Engines**

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

EU No.	Emission Unit Description (ARMS ID No. 0990332)
007	Cogeneration Plant - Reciprocating Internal Combustion Engines (5 Engines)

The following table provides important details for one of five engines regulated as EU 007:

Engine Identification	Duty	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.	Applicable Requirements
NHPC Fire Water Makeup	Emergency	155 (116 kW)	2002	2002	1.13	John Deere	6068T	40 CFR 63, Subparts A and ZZZZ This unit is an 'existing' unit.

*{Permitting Note: This compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800, F.A.C. This RICE is not used for a fire pump. This RICE is exempted from regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary Internal Combustion Engines (ICE) 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 Potential to Emit (PTE) Parameters****C.1. Hours of Operation.**

- a. Emergency Situations. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- b. Other Situations. The permittee may operate your emergency stationary RICE for any combination of the purposes specified in Conditions **C.1.b.(1)** through **(3)** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition **C.1.c.** of this section counts as part of the 100 hours per calendar year allowed by this Condition **C.1.b.**
  - (1) Maintenance and Testing. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]
  - (2) Emergency Demand Response. Each RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [40 CFR 63.6640(f)(2)(ii)]

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### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

(3) Voltage or Frequency Deviations. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 63.6640(f)(2)(iii)]

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

#### **C.2. Work or Management Practice Standards.**

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 & Table 2c.1.a.]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6602 & Table 2c.1.b.]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6602 & 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. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
- e. *Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
- f. *Oil Analysis.* The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 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. [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. [40 CFR 63.6625(f)]

#### **Compliance**

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

### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

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

#### **Recordkeeping Requirements**

**C.6. Notification, Performance and Compliance Records.** The owner or operator must keep:

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. Records of the occurrence and duration of each malfunction of operation.
- c. Records of all required maintenance performed on the hour meter.
- d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition D.5., including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- e. Records of the actions required in Specific Condition C.2.d. to show continuous compliance with each emission limitation or operating requirement.
- f. Records of the Work or Management Practice Standards specified in Specific Condition C.2.
- g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
- h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.

[40 CFR 63.6655]

**C.7. Record Retention.**

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

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

#### **Reporting Requirements**

**C.8. Delay of Performing Work Practice Requirements.** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition 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. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

The following table provides important details for two of six engines regulated as EU 007:

E.U. ID No.	Brief Description
007	Emergency Diesel-Fired Fire Pump Engines #1 and #2

### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

Engine #1 is a diesel fire pump, manufactured by Detroit Diesel Corporation, Model DDFP-L6VT-2362, 2300 RPM, 310 HP, in service pre-1995, 6 cylinders, 426 cubic inches, 6.98 liters.

Engine #2 is a Caterpillar Model 3208, 8 cylinder, 375 hp, in service pre-2005, 10.4 liters, 1.3 l/cylinder.

The following table provides important details for the above emission units:

Engine Brake HP	Duty	Date of Construction	Primary Fuel	Displacement liters/cylinder(l/c)	Applicable Requirements for Compression Ignition Type Engines
310 HP	Emergency	Pre-2005	Diesel	1.16 L /Cylinder	40 CFR 63, Subparts A and ZZZZ This engine is an 'existing' unit.
375 HP	Emergency	Pre-2005	Diesel	1.3 L/Cylinder	40 CFR 63, Subparts A and ZZZZ This engine is an 'existing' unit.

*{Permitting Note: These compression ignition (CI) engines used to drive emergency fire pumps are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800, F.A.C. Because these engines qualify as existing stationary RICE less than 500 HP operating at a major source of HAP, they are not subject to regulation under NSPS 40 CFR 60, Subpart IIII.}*

#### **Essential Potential to Emit (PTE) Parameters**

##### **C.9. Hours of Operation.**

- Emergency Situations.* There is no time limit on the use of this fire pump engine in emergency situations. [40 CFR 63.6640(f)(1)(i)]
- 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. Operation for maintenance checks and readiness testing is limited to 100 hours per year. [40 CFR 63.6640(f)(1)(ii)]
- 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. [40 CFR 63.6640(f)(1)]
- 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. [40 CFR 63.6625(h)]

#### **Emission Limitations and Operating Requirements**

##### **C.10. 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, as provided in e., below. [40 CFR 63 Table 2c(1)(a) and footnote 2]
- Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]
- Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Table 2c(1)(c)]
- 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. [40 CFR 63.6625(e) & 40 CFR 63.6640(a)]

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### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

- 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 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. [40 CFR 63.6625(i)]
- [40 CFR 63.6602]

#### **Monitoring of Operations**

- C.11. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

#### **Compliance**

- C.12. Continuous Compliance.** Each unit shall be in compliance with the operating standards in this section at all times. [40 CFR 63.6605(a)]
- C.13. Operation and Maintenance of Equipment.** At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

#### **Recordkeeping Requirements**

- C.14. Compliance Records.** The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. 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. [40 CFR 63.6655(f)]

#### **Reporting Requirements**

- C.15. Emergency Situation.** 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.10.** of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ. Table 2c, footnote 1]

**The following specific conditions in this section apply to one additional engine of the following emissions unit:**

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**SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS**

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**Subsection C. Reciprocating Internal Combustion Engines**

E.U. ID No.	Brief Description
007	Air Compressor #2 Cat C15 15.2 liters 6 cylinders, 540 HP

This unit is an emergency diesel engine generator. This engine fires ultra low sulfur diesel fuel.

The following table provides important details for this engine.

Engine Brake HP	Duty	Date of Construction	Primary Fuel	Displacement liters/cylinder (l/c)	Applicable Requirements for Compression Ignition Type Engines
540 HP	Emergency	2011	Diesel	1.16 L /Cylinder	40 CFR 63, Subparts A and ZZZZ; 40 CFR 60, Subpart IIII These engines are 'new' units.

*{Permitting Notes: These compression ignition reciprocating internal combustion engines (CI RICE) are 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, F.A.C.. They are "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 Potential to Emit (PTE) Parameters**

**C.16. Authorized Fuel.** This Stationary Reciprocating Internal Combustion Engine (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.
- Marking Provisions.** The diesel fuel fired shall be free of marker solvent yellow 124 until November 30, 2014. After December 1, 2014, there are no requirements or restrictions on the use of marker solvent yellow 124.
- 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), 80.510(c), 80.510(f)(2) & 80.510(f)(7)]

**C.17. Restricted Hours of Operation.**

- Maintenance and Testing.** This engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
- Emergency Situations.** There is no time limit on the use of emergency stationary RICE in emergency situations.
- Non-emergency Situations.** This engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.



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### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

- d. *Other Situations.* This engine cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)]

- C.18. Operation and Maintenance.** Except as permitted in Specific Condition **C.23.**, 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 **C.19. – C.20.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

#### **Emissions Standards**

- C.19. NO<sub>x</sub> + NMHC Emissions.** Emissions of NO<sub>x</sub> plus non-methane hydrocarbons shall not exceed 4.0 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]
- C.20. CO Emissions.** Carbon monoxide (CO) emissions shall not exceed 3.5 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]
- C.21. PM Emissions.** Particulate matter (PM) emissions shall not exceed 0.20 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]

#### **Testing and Compliance Requirements**

- C.22. 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 **C.23.** [40 CFR 60.4211(c)]
- C.23. 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. 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. [40 CFR 60.4211(g)(3)]
- C.24. Testing Requirements.** In the event performance tests are required pursuant to Specific Condition **C.23.**, the following requirements shall be met:
- Testing Procedures.* The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1042, Subpart F. [Link to Subpart F](#)
  - 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 **C.19. – C.21.**, determined from the following equation:  
NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)  
[40 CFR 60.4212(a) & (c)]

### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

**C.25. 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.]

#### **Monitoring Requirements**

**C.26. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

#### **Records and Reports**

**C.27. 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]

**C.28. 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 **C.23.**, 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.]

**C.29. Testing Notification.** At such time that the requirements of Specific Condition **C.23.** 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)]

**C.30. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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

E.U. ID No.	Brief Description
007	Back-up Generator; John Deere; 90 HP; Model 4045HFS80; 2013. 67.11 kW

This is a non-emergency RICE. This engine fires ultra-low sulfur diesel fuel.

The following table provides important details for this engine.

Engine Brake HP	Duty	Date of Construction	Primary Fuel	Model	Applicable Requirements for Compression Ignition Type Engines
90 HP	Non-Emergency	2013	Diesel	4045HFS80	40 CFR 60, Subparts A and III; 40 CFR 63, Subpart ZZZZ This engine is a 'new' unit.

#### **Essential Potential to Emit (PTE) Parameters**

**C.31. Authorized Fuel.** This Stationary Reciprocating Internal Combustion Engine (RICE) must use diesel fuel that meets the following requirements for non-road diesel fuel:

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### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

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#### Subsection C. Reciprocating Internal Combustion Engines

- a. *Sulfur Content.* The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra low sulfur) for non-road fuel.
- b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
- c. *Marking Provisions.* The diesel fuel fired shall be free of marker solvent yellow 124 until November 30, 2014. After December 1, 2014, there are no requirements or restrictions on the use of marker solvent yellow 124.
- d. *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), 80.510(c), 80.510(f)(2) & 80.510(f)(7)]

**C.32. Operation and Maintenance.** Except as permitted in Specific Condition **C.37.**, 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 **C.33.** – **C.35.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

#### **Emissions Standards**

**C.33. NO<sub>x</sub> + NMHC Emissions.** Emissions of NO<sub>x</sub> plus non-methane hydrocarbons shall not exceed 4.7 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]

**C.34. CO Emissions.** Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]

**C.35. PM Emissions.** Particulate matter (PM) emissions shall not exceed 0.40 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]

#### **Testing and Compliance Requirements**

**C.36. 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 **C.37.** [40 CFR 60.4211(c)]

**C.37. Compliance Requirements Due to Loss of Certification.** If the permittee does not install, configure, operate, and maintain your 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. 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.

[40 CFR 60.4211(g)(3)]

**C.38. Testing Requirements.** In the event performance tests are required pursuant to Specific Condition **C.37.**, the following requirements shall be met:

### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

#### Subsection C. Reciprocating Internal Combustion Engines

- c. *Testing Procedures.* The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1042, Subpart F. [Link to Subpart F](#)
- d. *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 **C.33.** – **C.35.**, determined from the following equation:

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

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

**C.39. 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.]

#### **Monitoring Requirements**

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

**C.41. 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 **C.37.**, 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.]

**C.42. Testing Notification.** At such time that the requirements of Specific Condition **C.37.** 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)]

**C.43. 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**

**C.44. 40 CFR 60 Subpart A, General Provisions.** The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below. [Link to 40 CFR 60, Subpart A - General Provisions.](#)

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification
§ 60.15	Reconstruction
§ 60.16	Priority list
§ 60.17	Incorporations by reference
§ 60.19	General notification and reporting requirements

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**SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS**

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**Subsection C. Reciprocating Internal Combustion Engines**

[40 CFR 60.4218]

**C.45.** 40 CFR 63 Subpart A - General Provisions. The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. [Link to 40 CFR 63, Subpart A - General Provisions](#)

<b>General Provisions Citation</b>	<b>Subject of Citation</b>
§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
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)-(5)	Initial notifications (except that §63.9(b)(3) is reserved)
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### D. Sugar Refinery

This subsection addresses the following emissions units.

EU No.	Emissions Unit Description
021	Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1
022	Central Dust Collection System No. 2 with Rotoclone No. 2 – “B” System
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 Station
043	Sugar Refinery Alcohol Usage
054	Wet Roto-clone No. 6 – “A” System (Permit No.0990005-027-AC)
055	Wet Roto-clone No. 7 - “C” System (Permit No. 0990005-027-AC)
059	Dust Collection System (Baghouse) – (Emissions control for Pkg. Lines 16, 17, 18 and 19)

*{Permitting Note: The sugar refinery was last modified by Permit No. 0990005-030-AC.} (0990005-031-AC was a short term exemption for a temporary jaw crusher used in demolition of the carpenter shop and three adjacent concrete slabs). Permit No. 0990005-035-AC added a baghouse (EU-034) to the Bulk Load-Out, and Permit No. 0990005-037-AC added a baghouse and Packaging Lines No. 16, 17, 18 and 19 to Warehouse No.3. One of these was the original Packaging Line No. 5 in the Transshipment Facility (which is replaced by a brown Sugar packaging line of same capacity and re-designated as Packaging Line No. 5).*

#### **Miscellaneous Process Descriptions**

The sugar refinery consists of several miscellaneous emissions units that handle, process, store, and transfer a variety of sugar products. These units and activities can generate emissions of particulate matter, mostly sugar. In 2008, Permit No. 0990005-021-AC authorized the expansion of the mill boiling house by installing new process equipment to produce specialty sugars products. The permit authorized: 1) an increase in the capacity of total refined sugar production; 2) an increase in the capacity of refined sugar production from the Fluidized Bed Dryer/Cooler baghouse system, the Bulk Load-out Station, and the Transfer Bulk Load-out Station; 3) a modification of Central Dust Collection System Nos. 1 and 2; an overall reduction in particulate matter emissions; and 5) alternative methods of operation for the Fluidized Bed Dryer/Cooler and the Rotary Dryer/Cooler systems.

The primary sugar drying system is a Fluidized Bed Dryer/Cooler (EU-025) with a design equipment capacity of approximately 1350 tons per day. 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 (Type BETHPULS 6.60 x 7.5.10). 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, (uses 2 gpm water injection), which exhausts 89 feet above grade. Sugar from the rotary dryer is directed to two coolers (EU-023 and EU-024), each with a design capacity of 1350 tons per day. 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 3-stage high-production mode (rotary dryer followed by two coolers operating in series) is needed when producing approximately 1000 tons per day of refined white sugar and 600 tons per day of specialty sugars. When operating the rotary system in the low-production mode (< 1000 tons white sugar per day or < 600 tons specialty sugar per day), Cooler No. 1 (EU-023) functions as the 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.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### D. Sugar Refinery

Dust collection System “A”, *Roto-clone No. 6* (EU-054) controls fourteen (14) drop points at the fluidized Bed System and fourteen (14) 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)

Dust Collection, System “B”, *Roto-clone No. 2* (EU-022) which exhausts 86 feet above grade, is used to control dust emissions from several miscellaneous sources. Total drop points controlled are twenty (20) at the Fluidized Bed System, and four (4) 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)
- Bulk Curing Bins 4, 5, or 6
- Bucket Elevators 43 and 15
- Production Scale, Silo Scale, HN-1, Rotex

Dust Collection, System “C”, *Roto-clone No. 7* (EU-055), controls twelve (12) drop points in the Fluidized Bed System, and one (1) 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

The Bulk Load-Out Operation (EU-034) with a design equipment capacity of 600 tons per day 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 that was authorized to be constructed by Air Construction permit No. 0990005-035-AC*.

The Transfer Bulk Load-Out Station (EU-035) with a design equipment capacity of 1200 tons per day 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.

The expansion project extended by 40 feet the south end of the sugar refinery building (now 40 feet by 120 feet), which houses the following associated process equipment: The following equipment will be housed in the expansion: two melters, two syrup tanks, two grain receiver tanks, two vacuum pans, two magma/cut tanks, two batch centrifuges, two molasses tanks, two screw conveyors, one magma mingler, one run-off tank, a motor control center room, and various pumps and piping systems. The other portion of the existing sugar refinery building houses the following associated process equipment: a 1700-cubic feet vacuum pan, a vacuum pan condenser, two centrifugals, syrup and molasses feed tanks, final liquor syrup storage tanks, one 5000 gallon condensate collection tank, one 1000 gallon centrifugal wash water tank, two 1200 cubic feet seeder cutover tanks, a motor control center room, the motor control center and centrifugal controller room, a refined sugar conveying system, one 2000 cubic feet receiver and various pumps.

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.

A Baghouse (Dust Collection System (EU-059) and four (4) sugar packaging lines (Packaging Lines No. 16, 17, 18 and 19), are located in Warehouse No. 3. The additional packaging lines are a separate operation from the existing speciality Sugar production in Warehouse No. 3. Two (2) rooms are built into the interior of the warehouse. Two (2) packaging lines to package artificial sweeteners are installed in one (1) room (Packaging Lines No. 16 and 17) and two (2) packaging lines for speciality sugars are housed in the second room (Packaging Lines No. 18 and 19). (One

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### D. Sugar Refinery

(1) of these packaging lines is actually the existing packaging line No. 5 located in the Transshipment Facility which is relocated to Warehouse No.3. It is replaced in the Transshipment Facility by a brown sugar packaging line of the same capacity and it is re-named as Packaging Line No. 5).  
(Permit No. 0990009-037-AC).

The potential emissions from the packaging lines consists of particulate matter (PM) in the form of sugar dust, and all four (4) packaging lines are controlled by one (1) dust collector (baghouse) (EU-059).

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

#### Equipment Specifications

##### D.1. Baghouse Specifications.

##### 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 <sup>2</sup>
Air-to-cloth ratio	7.81 cfm/ft <sup>2</sup>
Control efficiency	99.8% (PM and PM <sub>10</sub> )

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

##### BULK LOAD-OUT OPERATION (EU-034)

The 3,400 acfm Baghouse (Dust Collection System) controls particulate emissions (PM)

To control particulate 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 <sup>2</sup>
Air-to-cloth ratio	2.2:1 cfm/ft <sup>2</sup>
Control efficiency	99.8% (PM and PM <sub>10</sub> )

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

##### PACKAGING LINES No. 16, 17, 18 & 19 (EU-059)

The 3,400 acfm Baghouse (Dust Collection System) controls particulate emissions (PM)

To control particulate emissions from Packaging Lines No. 16, 17, 18 and 19 in Warehouse No. 3, the permittee shall operate and maintain a baghouse control system with the following specifications:



**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS****D. Sugar Refinery**

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

**D.2. Cyclonic Control Devices.** The permittee shall operate and maintain the following emission 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 <sub>10</sub>
021	Rotary Dryer, Central Dust Collection System No. 1	Roto-clone No. 1	15,000	2	99.9%	99%
022	“B” System	Roto-clone No. 2	14,770	2	99.9%	99%
023	Cooler No. 1	Roto-clone No. 3	15,000	2	99.9%	99%
024	Cooler No. 2	Roto-clone No. 4	15,000	2	99.9%	99%
054	“A” System	Roto-clone No. 6	15,078	2	99.9%	99%
055	“C” System	Roto-Clone 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]

**Capacity and Performance Restrictions**

**D.3. Permitted Capacities.** Total refined sugar production (Fluidized Bed Dryer (EU-025), Rotary Dryer (EU-021), Cooler No. 1 (EU-023) and Cooler No. 2 (EU-024) shall not exceed 490,000 tons during any consecutive 52-week period, and:

- The Rotary System (EU-021, EU-023 and EU-024) shall not process more than 130,000 tons during any consecutive 52-week period.
- The Bulk Load-Out Operation (EU-034) shall not process more than 139,000 tons of refined sugar during any consecutive 52-week period. [Rules 62-4.210, 62-4.070(3) and 62-210.200(PTE), F.A.C and Permit No. 0990005-035-AC]
- 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.
- Isopropyl alcohol usage (EU-043) from the sugar refinery shall not exceed 78,040 pounds during any consecutive 52-week period.

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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#### D. Sugar Refinery

- e. Production rate for the four (4) combined packaged Sugar/Sweeteners (Packaging Lines No. 16, 17, 18 and 19) is 181.2 Tons Per Day (TPD). [Permit No. 0990005-037-AC].

[Rules 62-4.210 and 62-4.070(3), F.A.C.; and Permit No. 0990005-021-AC, 0990005-027-AC, 0990005-035-AC and 0990005-037-AC]

- D.4. Hours of Operation.** Operation of the sugar refinery is limited by the limitations on processing capacities. The hours of operation are not limited (8,760 hours per year). [Permit No. 0990005-021-AC, 0990005-027-AC; 0990005-035-AC, and 0990005-037-AC.]

#### **Methods of Operation**

- D.5. Method of Operation.** The owner or operator is authorized to operate the dryers in any of the following methods.

- a. The Fluidized Bed Dryer (EU-025) only;
- b. Rotary System only:
  - 1) 3-Stage High-Production Mode: The Rotary Dryer (EU-021) 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 tons per day for white refined sugar and above 600 tons per day for specialty sugars.
  - 2) 2-Stage Low-Production Mode: The Rotary Dryer (with Rotoclone No. 1, EU-021) is off and Cooler No. 1 (with Rotoclone No. 3, EU-023) is operated as a dryer followed by Cooler No. 2 (with Rotoclone No. 4, EU-024) in series. In this mode, low production rates are below 500 tons per day for specialty sugars.
- c. The Fluidized Bed Dryer (EU-025) and Rotary System (EU-021, EU-023 and EU-024) may be operated simultaneously. The dryers and sugar refinery are subject to the production and processing limitations specified in Specific Condition No. 3 of this subsection. [Permit No. 0990005-021-AC and -027-AC.

#### **Emission Limiting Standards**

#### **D.6. Visible Emissions.**

- a. Visible emissions shall not exceed 5 percent opacity from the following exhaust points: Rotary Dryer, Central Dust Collection System No. 1 with Roto-clone No. 1 (EU-021); Central Dust Collection System No. 2 with "B" System Roto-clone No. 2 (EU-022); Cooler No. 1 with Roto-clone No. 3 (EU-023); Cooler No. 2 with Rotoclone No.4 (EU-024); Also "A" System "Roto-clone No. 6 (EU-054), "C" System Roto-clone No. 7, (EU-055), Fluidized Bed, Dryer/Cooler Baghouse (EU-025) and Baghouse for Packaging Lines No. 16, 17, 18 and 19. (EU-059).
- b. Visible emissions shall not exceed 5 percent opacity from the following areas: the Bulk Load-Out Operation (EU-034).
- c. Visible emissions shall not exceed 20 percent opacity from the following areas: the Transfer Bulk Load-out Station (EU-035) and fugitive emissions at the sugar refinery.

[Rules 62-296.320(4) and 62-297.620(4), F.A.C.; Permit No. 0990005-035-AC; 0990005-021-AC, Specific Condition 6; 099000-037-AC.]

- D.7. PM/PM10 Emissions.** The sum of emissions shall not exceed 19.77 tons of PM per year and 2.9 tons of PM<sub>10</sub> per year from the following emission units: the Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1 (EU-021); the Central Dust Collection System No. 2 ("B" System) with Rotoclone No. 2 (EU-022); the Cooler No. 1 with Rotoclone No. 3 (EU-023); the Cooler No. 2 with Rotoclone No.4 (EU-024); the Fluidized Bed Dryer/Cooler with Baghouse (EU-025); "A" System Roto-clone No. 6 (EU-054); "C" System Roto-clone No. 7 (EU-055); the Bulk Load-Out Operation (EU-034); and the Transfer Bulk Load-out Station (EU-035). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0990005-035-AC]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### D. Sugar Refinery

**D.8. 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 <sub>10</sub>
021	Rotary Dryer, Central Dust Collection System No. 1 with Roto-clone No. 1	4.09	1.645
022	Central Dust Collection System No. 2 with Roto-clone No. 2 ("B" System)	0.54	0.215
023	Cooler No. 1 with Roto-clone No. 3	4.09	1.64
024	Cooler No. 2 with Roto-clone No.4	0.45	0.18
025	Fluidized Bed Dryer/Cooler with Baghouse	14.70	0.588
034	Bulk Load-Out Operation	1.28	0.051
035	Transfer Bulk Load-out Station	1.83	0.073
054	Roto-clone No. 6 ("A" System)	0.46	0.184
055	Roto-clone No. 7 ("C" System)	0.31	0.123
059	Baghouse, Pkg. Lines 16, 17, 18 & 19	1.28	0.051

[Permit No. 0990005-021-AC, 0990005-035-AC and 0990005-037-AC]

**D.9. PM/PM10 Emission Factors.** The permittee shall use the following emission factors to calculate PM/PM<sub>10</sub> emissions (including calculations for the Annual Operating Report).

EU No.	Description	PM		PM <sub>10</sub>	
		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 <i>with Baghouse</i>	–	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	Roto-clone No. 6 ("A" System)	1.463 lb/ton	99.9%	0.059 lb/ton	99.0%
055	Roto-clone No. 7 ("C" System)	0.105 lb/ton (Rotary Dryer) 1.254 lb/ton	99.9%	0.0042 lb/ton (Rotary Dryer) 0.050 lb/ton	99.0 %

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### D. Sugar Refinery

EU No.	Description	PM		PM <sub>10</sub>	
		Uncontrolled	Control Efficiency	Uncontrolled	Control Efficiency
		(Fluidizer Drying)		(Fluidizer Drying)	
<b>059</b>	<i>Pkg. Lines 16, 17, 18 &amp; 19 with Baghouse (Warehouse 3).</i>	–	0.010 gr/acf	–	0.00040 gr/acf

[Permit No. 0990005-021-AC, 0990005-027-AC, 0990005-035-AC and 0990005-037-AC]

**D.10. Alcohol Usage.** VOC emissions from alcohol usage shall not exceed 39.00 tons during any consecutive 52-week period. (*Permitting Note: VOC emissions are contributed mainly from isopropyl alcohol.*) [Permit No. 0990005-021-AC]

#### **Testing Requirements**

**D.11. Annual Compliance Tests.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the following baghouse and Roto-clone exhaust points shall be tested to demonstrate compliance with the (VE) opacity standard specified in this subsection: Rotary Dryer, Central Dust Collection System No. 1 with Roto-clone No. 1 (EU-021); Central Dust Collection System No. 2 (“B” System) with Roto-clone No. 2 (EU-022); Cooler No. 1 with Roto-clone No. 3 (EU-023); Cooler No. 2 with Roto-clone No.4 (EU-024); Fluidized Bed Dryer/Cooler with Baghouse (EU-025); Bulk Load-Out Operation (EU-034), “A” System with Roto-clone No. 6 (EU-054); “C” System with Roto-clone No. 7 (EU-055) and Baghouse, Pkg. Lines 16, 17, 18 & 19 (EU-059).

[Rule 62-297.310(7)(a)4, F.A.C. and Permit No.0990005-021-AC, 0990005 -027-AC, 099005-035-AC and 0990005-037-AC].

**D.12. Tests Prior to Renewal.** Within the 12-month period prior to renewing the operation permit, the following baghouse and Rotoclone exhaust points shall be tested to demonstrate compliance with the (VE) opacity standard specified in this subsection: Rotary Dryer, Central Dust Collection System No. 1 with Roto-clone No. 1 (EU-021); Central Dust Collection System No. 2 with “B” System Roto-clone No. 2 (EU-022); Cooler No. 1 with Rotoclone No. 3 (EU-023); Cooler No. 2 with Rotoclone No.4 (EU-024); and Fluidized Bed Dryer/Cooler with Baghouse (EU-025). Bulk Load-Out Operation (EU-034), “A” System Roto-clone No. 6 (EU-054) “C” System Roto-clone No. 7 (EU-055) and Baghouse, Pkg. Lines 16, 17, 18 & 19 (EU-059). [Rule 62-297.310(7) (a) 3, F.A.C.]

**Test Method.** Tests to determine visible emissions shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. [Rules 62-204.800 and 62-297.310(4), F.A.C.; 40 CFR 60, Appendix A; and Permit No. 0990005-021-AC, 0990005-027.

**D.13. PM Testing:** The PM compliance test requirements are waived in lieu of the alternative opacity standard of 5 percent for: Rotary Dryer, Central Dust Collection System No. 1 with Roto-clone No. 1 (EU-021); Central Dust Collection System No. 2 with Roto-clone No. 2 (EU-022) “B” System; Cooler No. 1 with Rotoclone No. 3 (EU-023); Cooler No. 2 ,with Roto-clone No.4 (EU-024); Fluidized Bed Dryer/Cooler with Baghouse (EU-025); Bulk Load-Out Operation (EU-034), “A” System with Roto-clone No. 6 (EU-054); “C” System with Roto-clone No. 7 (EU-055) and Baghouse, Pkg. Lines 16, 17, 18 & 19 (EU-059).

#### **Test Procedures.**

- a. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CT (Compliance Testing Requirements).
- b. The minimum observation period for a visible emissions compliance test shall be 30 minutes.

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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#### D. Sugar Refinery

- c. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
- d. 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]

**D.15. Test Notification.** At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Compliance Authority of: the test to be conducted; the date, time and the place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Permit No. 0990005-021-AC; Rule 62-297.310(7), F.A.C.]

#### **Recordkeeping and Reporting Requirements**

**D.16. 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(8), F.A.C. [Rule 62-297.310(8), F.A.C. and Permit No. 0990005-021-AC, 0990005-035-AC and 0990005-037-AC].

**D.17. Operational Data.** The permittee shall maintain daily and weekly records to demonstrate compliance with the permit limitations specified in Specific Condition **D.3.** 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 No. 0990005-021-AC, 0990005-027-AC and 0990005-035-AC].

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### E. Transshipment Facility

This section of the permit addresses the following emissions units.

ID	Emission Unit Description	ID	Emission Unit Description
018	Central vacuum system No. 1	045	Powdered sugar dryer/cooler, packaging Line 8B
019	Sugar packaging Lines 0-4, 5A and 9	046	Powdered sugar hopper
020	Sugar grinder	047	Sugar packaging lines (Nos. 12, 13 and 14)
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)	049	Baghouse (Currently inactive).
031	Railcar sugar unloading receiver No. 1		
032	Railcar sugar unloading receiver No. 2		

*{Permitting Note: Permit Nos. 0990005-019-AC and 0990005-023-AC re-defined the equipment and capacity of the transshipment facility.}*

#### **Process Description**

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 the transshipment facility at one of three locations. At the east truck receiving dock, trucks are pneumatically unloaded into a main sugar receiver, which pneumatically 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 and sugar is transferred from trucks by screw conveyors to a bucket elevator feeding one of three storage silos (EU-030). At the north railcar receiving station just west of the sugar silos, railcars will be pneumatically unloaded into two sugar receivers (EU-031 and EU-032) for transfer by screw conveyor to a bucket elevator feeding one of three storage silos. Each sugar receiver is controlled by a baghouse. The west receiver will also transfer sugar directly to a surge bin for packaging line "0", which will be used to fill totes north of packaging line "1" in the existing packaging room.

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 packaging lines.

Sugar is packaged in one of 15 packaging lines, eleven (11) of which are controlled by baghouse systems : Lines 0, 1-5A, and 9 (EU-019), Line 8B (EU 045), and Lines 12, 13 and 14 (EU-047). Baghouse (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.

The Trans-Shipments Facility, Packaging line 10 Baghouse is EXEMPT (Permit No. 0990005-029-AC and -030-AC) as it is vented to outside of the refinery building with minimal emissions. (The total emissions from this baghouse are calculated at 0.15 pound/hr. and 0.64 tons/year).

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.

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### E. Transshipment Facility

##### Equipment Specifications

**E.1. Baghouse Design Specifications.** Each of the following emissions units shall be controlled by a baghouse that is designed, operated, and maintained to achieve the particulate matter baghouse design specification (grains/scf) identified in the following table.

ID	Emission Unit Description	Baghouse Specification <sup>a</sup> grains/scf	Exhaust Rate scfm	Stack/Vent Height Feet	Maximum Emissions <sup>b</sup>	
					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	0.01	9869	27	0.85	3.71
020	Sugar grinder	0.0005	2961	39	0.013	0.06
030	Sugar silo No. 1 (Point #S1101)	0.02	500	65	0.086	0.38
	Sugar silo No. 2 (Point #S1102)	0.02	500	65	0.086	0.38
	Sugar silo No. 3 (Point #S1103)	0.02	500	65	0.086	0.38
031	Railcar unloading receiver No. 1	0.02	615	5	0.11	0.46
032	Railcar unloading receiver No. 2	0.02	615	5	0.11	0.46
045	Powdered sugar dryer/cooler, Packaging Line 8B	0.01	8640	48	0.74	3.24
046	Powdered sugar hopper	0.01	1728	42	0.15	0.68
047	Sugar Packaging Lines Nos. 12, 13 and 14	0.01	3629	48	0.49	2.16
049	Baghouse (currently inactive)	0.02	2212	9	0.38	1.66
					Total	13.68

- New and replacement bags shall meet these specifications based on vendor information. No particulate matter emissions tests are required.
- 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 Nos. 0990005-019-AC and 0990005-023-AC]

##### Capacity and Performance Restrictions

**E.2. Permitted Capacity.** The maximum sugar packaging rate is 1,300 tons per day. [Permit Nos. 0990005-019-AC and 0990005-023-AC and Title V application received May 15, 2012]; Rule 62-210.200 (PTE), F.A.C.]

**E.3. Restricted Operation.** The hours of operation of are not limited (8,760 hours per year). [Permit Nos. 0990005-019-AC and 0990005-023-AC; and Rule 62-210.200 (PTE), F.A.C.]

##### Emission Limiting Standards

**E.4. Opacity Standard:** As determined by EPA Method 9 observations, visible emissions from each baghouse exhaust point shall not exceed 5 percent opacity. [Permit Nos. 0990005-019-AC and 0990005-023-AC; and Rule 62-4.070(3), F.A.C.]

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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### E. Transshipment Facility

#### Testing

- E.5. Annual Compliance Tests.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)4, F.A.C.]
- E.6. Tests Prior to Renewal.** Within the 12-month period prior to renewing the operation permit, each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)3, F.A.C.]
- E.7. Test Notification.** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required test. [Rule 62-297.310(7)(a)9, F.A.C.]
- E.8. Test Method:** All tests shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also comply with the applicable requirements of Rule 62-297.310, F.A.C. See Appendix CT. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]
- E.9. Test Procedures:** Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C. as specified in Appendix CT. The minimum observation period for a visible emissions compliance test shall be 30 minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. The permittee shall record the actual sugar processing rate for the emissions unit being controlled and tested. [Rule 62-297.310(4) and (5), F.A.C.]
- E.10. Test Notification:** At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Compliance Authority of: the date, time, and place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

#### Recordkeeping and Reporting

- E.11. Test Reports.** For each visible emissions test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the Compliance Authority as soon as practical, but no later than 45 days after the last sampling run of each test is completed. See Appendix CT in Section 4 of this permit. [Rules 62-297.310(8), F.A.C.]
- E.12. Operational Data.** The permittee shall maintain daily and monthly records to demonstrate compliance with the specified maximum sugar packaging rate. [Permit Nos. 0990005-019-AC and 0990005-023-AC; and Rule 62-4.070(3), F.A.C.]

#### Other Applicable Requirements

- E.13. Compliance Plan.** The permittee shall comply with the provisions of the Compliance Plan as specified in Appendix CP in Section 4 of this permit. [Rule 62-213.440(2), F.A.C.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### F. Distillate Oil Storage Tanks

This subsection addresses the following emissions units.

ARMS ID No. 0990332 - New Hope Power Company's Okeelanta Cogeneration Plant

EU No.	Emissions Unit Description	Process Area
005	Distillate Oil Storage Tank (50,000 gallons)	Cogeneration Plant

ARMS ID No. 0990005 – Okeelanta Corporation's Sugar Mill and Refinery

EU No.	Emissions Unit Description	Process Area
040	Facility Fuel Tank Farm	Facility

#### Equipment Capacities and Performance Restrictions

##### F.1. Oil Storage Tanks.

- a. ARMS ID No. 0990332: The distillate oil storage tank (EU-005) has a capacity of 50,000 gallons. [Permit No. 0990005-016-AC]
- b. Miscellaneous tanks installed on or before July 23, 1984 are not subject to the NSPS Subpart Kb provisions in 40 CFR 60. Fuel and oil tanks with a storage capacity of 19,813 gallons or less are not subject to NSPS Subpart Kb provisions. Fuel and oil tanks with a storage capacity between 19,813 gallons and 39,890 gallons shall store only volatile organic liquids with a maximum true vapor pressure of less than 15.0 kilopascals (kPa) or 2.17 pounds per square inch, absolute (psia). Fuel and oil tanks with a storage capacity of 39,890 gallons or more shall store only volatile organic liquids with a maximum true vapor pressure of less than 3.5 kPa (0.51 psia). This condition ensures that the storage tanks are not subject to the NSPS Subpart Kb provisions in 40 CFR 60. [NSPS Subpart Kb, §60.110b] [Rule 62-210.200 (PTE), F.A.C.]

#### Records

- F.2. Records. The permittee shall maintain records of the types and amounts of fuel stored in EU-005. Distillate oil shall meet the requirements of the Fuel Management Plan in Appendix AM and FM of this permit. [Rule 62-4.070(3), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### G. Paint Spray Booth – Farm Operations

This permit addresses the following emissions unit:

EU No.	Emissions Unit Description	Process Area
048	Paint Booth	Okeelanta Shop

*{Permitting Note: Permit No. 0990005-015-AC redefined this emissions unit. 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/PM<sub>10</sub>).}*

#### **Equipment Specifications**

**G.1. Method 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. 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). [Permit Nos. 0990005-015-AC and 0990005-016-AC]

#### **Emissions Limiting and Performance Restrictions**

**G.2. Hours of Operation.** The hours of operation for this emissions unit are not restricted (8,760 hours per year). [Permit No. 0990005-015-AC; Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.]

**G.3. Permitted Capacity.** The maximum throughput rate of paint and thinner shall not exceed 4,950 gallons in any consecutive 12 months. [Permit No. 0990005-015-AC; Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.]

**G.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. [Specific Conditions 7 and 9 in Permit No. 0990005-015-AC; Rule 62-210.200 (PTE), F.A.C.]

**G.5. Visible Emissions.** Visible emissions from the paint spray booth shall not exceed 20 percent opacity. [Specific Condition 12 in Permit No. 0990005-015-AC; Rule 62-296.320 (General VE), F.A.C.]

**G.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). [Permit No. 0990005-015-AC; Rule 62-210.200 (PTE), F.A.C.]

#### **Testing**

**G.7. Special Compliance Tests.** In accordance with Rule 62-297.310(7)(b), F.A.C., the Compliance Authority may require a compliance test for visible emissions. [Permit No. 0990005-015-AC; Rule 62-297.310(7)(b), F.A.C.]

#### **Recordkeeping and Reporting**

**G.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 VOC/HAP from each solvent-containing material shall be determined from the Material Safety Data Sheets (MSDS) supplied by the vendors. The permittee shall maintain a file of MSDS for each solvent-containing

### **SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

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#### **G. Paint Spray Booth – Farm Operations**

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 Annual Operating Report. [Permit 0990005-015-AC; Rules 62-210.370 and 62-4.070(3), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### H. Reciprocating Internal Combustion Engines

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

EU No.	Emission Unit Description (ARMS ID No. 0990005)
<b>060</b>	Okeelanta Reciprocating Internal Combustion Engines (10 total)

The following table provides important details for seven of the ten engines regulated as EU 060:

Engine Identification	Engine Brake HP	Date of Manufacture	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.	Applicable Regulations
Emergency Diesel Engine	173	2008 (3)	2008	1.12 L /Cylinder	Case	P170	40 CFR 60, Subparts A and IIII; 40 CFR 63, Subpart ZZZZ These engines are 'new' units.
129 kW	173	2009 (2)	2009	1.13 L /Cylinder	Case	P170	40 CFR 60, Subparts A and IIII; 40 CFR 63, Subpart ZZZZ These engines are 'new' units.
Tier 3.	173	2010 (2)	2010	1.12 L /Cylinder	Case	P170	40 CFR 60, Subparts A and IIII; 40 CFR 63, Subpart ZZZZ These engines are 'new' units.

The following table provides important details for the eighth engine regulated as EU 060:

E.U. ID No.	Brief Description
<b>060</b>	DC Drainage Pump; John Deere; 80 HP; Model 4045D270B; 2006. 1.13 L/Cylinder, Tier 2.

*{Permitting Notes: These compression ignition reciprocating internal combustion engines (CI RICE) are 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, F.A.C. These are a "new" stationary non-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.}*

The conditions below apply to each engine:

#### **Essential Potential to Emit (PTE) Parameters**

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

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### H. Reciprocating Internal Combustion Engines

- a. *Sulfur Content.* The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra low sulfur) for non-road fuel.
  - b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
  - c. *Marking Provisions.* The diesel fuel fired shall be free of marker solvent yellow 124 until November 30, 2014. After December 1, 2014, there are no requirements or restrictions on the use of marker solvent yellow 124.
  - d. *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), 80.510(b) and (c), 80.510(f)(2) & 80.510(f)(7)]

**H.2. Operation and Maintenance.** Except as permitted in Specific Condition **H.10.**, 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 **H.3. - H.8.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

#### **Emissions Standards for the 173 HP Engines**

- H.3. NO<sub>x</sub> + NMHC Emissions.** Emissions of NO<sub>x</sub> plus non-methane hydrocarbons shall not exceed 4.0 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]
- H.4. CO Emissions.** Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]
- H.5. PM Emissions.** Particulate matter (PM) emissions shall not exceed 0.30 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]

#### **Emissions Standards for the 80 HP Engine**

- H.6. NO<sub>x</sub> + NMHC Emissions.** Emissions of NO<sub>x</sub> plus non-methane hydrocarbons shall not exceed 7.5 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]
- H.7. CO Emissions.** Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]
- H.8. PM Emissions.** Particulate matter (PM) emissions shall not exceed 0.40 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(a) & 40 CFR 89.112]

#### **Testing and Compliance Requirements**

- H.9. 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 **H.10.** [40 CFR 60.4211(c), 60.4211(g)(1) for engines <100 hp]
- H.10. 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.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### H. Reciprocating Internal Combustion Engines

[40 CFR 60.4211(g)(2)]

**H.11. Testing Requirements.** In the event performance tests are required pursuant to Specific Condition **H.10.**, the following requirements shall be met:

- Testing Procedures.** The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. [Link to Subpart F](#)
- 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 **H.3. – H.8.**, determined from the following equation:

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

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

**H.12. 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.]

#### **Monitoring Requirements**

**H.13. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a) (only applies to emergency engines, not non-emergency)]

**H.14. 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 **H.10.**, 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.]

**H.15. Testing Notification.** At such time that the requirements of Specific Condition **H.10.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1)]

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

**H.17. The specific conditions that follow in this section apply to the following emissions unit:**

The following table provides important details for the ninth and tenth engines regulated as EU 060:

E.U. ID No.	Brief Description
060	Fire Pump Rock Pit by Cooling Tower Engines #1 and #2. John Deere; Model 6068; 2002; 1.13 L/Cylinder displacement. 160 HP; 119.31 kW.

These are emergency-use RICE engines.

*{Permitting Note: These compression ignition (CI) engines used to drive emergency fire pumps are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. Because these engines qualify as existing stationary RICE less than 500 HP operating at a major source of HAP, they are not subject to regulation under NSPS 40 CFR 60, Subpart IIII.}*

*The conditions below apply to each engine:*

#### **Essential Potential to Emit (PTE) Parameters**

**H.18. Hours of Operation.**

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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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### H. Reciprocating Internal Combustion Engines

- a. *Emergency Situations.* There is no time limit on the use of this fire pump engine in emergency situations. [40 CFR 63.6640(f)(1)(i)]
- b. *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. Operation for maintenance checks and readiness testing is limited to 100 hours per year. [40 CFR 63.6640(f)(1)(ii)]
- c. *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. [40 CFR 63.6640(f)(1)]
- d. *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. [40 CFR 63.6625(h)]

#### **Emission Limitations and Operating Requirements**

##### **H.19. Work or Management Practice Standards.**

- 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, as provided in e., below. [40 CFR 63 Table 2c(1)(a) and footnote 2]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 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. [40 CFR 63.6625(e) & 40 CFR 63.6640(a)]
- 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 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. [40 CFR 63.6625(i)]

[40 CFR 63.6602]

#### **Monitoring of Operations**

- H.20. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

#### **Compliance**

- H.21. Continuous Compliance.** Each unit shall be in compliance with the operating standards in this section at all times. [40 CFR 63.6605(a)]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### H. Reciprocating Internal Combustion Engines

**H.22.** Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

#### **Recordkeeping Requirements**

**H.23.** Compliance Records. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. 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. [40 CFR 63.6655(f)]

#### **Reporting Requirements**

**H.24.** Emergency Situation. 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 **H.19.** of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ. Table 2c, footnote 1]

#### **General Provisions**

**H.25.** 40 CFR 60 Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below. [Link to 40 CFR 60, Subpart A - General Provisions.](#)

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification
§ 60.15	Reconstruction
§ 60.16	Priority list
§ 60.17	Incorporations by reference
§ 60.19	General notification and reporting requirements

[40 CFR 60.4218]

#### **Other Federal Requirements**

**H.26.** 40 CFR 63, Subpart A. In addition to the above requirements, this emissions unit shall also comply with the applicable requirements listed below, which are contained in the attached Appendix NESHAP A: 40 CFR 63, Subpart A - General Provisions.



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**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

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**H. Reciprocating Internal Combustion Engines**

<b>General Provisions Citation</b>	<b>Subject of Citation</b>
§63.1	General applicability of the General Provisions
§63.2	Definitions. Additional terms defined in §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(j)	Presidential compliance exemption
§63.7(a)(3)	CAA section 114 authority
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA
§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)	Records 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

[40 CFR 63.6665]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### I. EU 057 – 300 HP Gas-Fired Boiler

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

EU No.	Emission Unit Description (ARMS ID No. 0990005)
057	300 HP 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	2011	2011	12.17 MMBtu/hr	Cleaver Brooks	CBLE 200

The unit is subject to 40 CFR 63, Subpart DDDDD and is considered existing, large and natural gas fired.

#### Equipment

**I.1. Steam Boiler.** The permittee is authorized to tune, operate and maintain a 12.17 MMBtu/hour gas-fired boiler (Cleaver Brooks CBLE 200). [0990005-040-AV, Application.]

#### Applicable Standards and Regulations

**I.2. NESHAP Subpart DDDDD Applicability.** The steam boiler is subject to all applicable requirements of 40 CFR 63, Subpart DDDDD, which applies to Industrial, Commercial, or Institutional Boilers. [40 CFR Part 63, Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters]

**I.3. Compliance Date.** The permittee shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD no later than January 31, 2016. [40 CFR 63.7495(a)]

#### Performance Restrictions

**I.4. Permitted Capacity.** The heat input to the steam boiler shall not exceed 12.17 MMBtu per hour while firing natural gas. [Design; Rule 62-210.200, F.A.C. (Definition - PTE); 0950005-040-AV, Application.]

**I.5. Method of Operation - Fuels.** The steam boiler shall be fired solely with pipeline-quality natural gas. [Rule 62-210.200, F.A.C. (Definition - PTE); and 0990005-040-AV, Application.]

**I.6. Hours of Operation.** The steam boiler may operate throughout the year (i.e., 8,760 hours per year). [Rule 62-210.200, F.A.C. (Definitions - PTE); 0950111-037-AC, Application.]

#### Work Practice Standards

**I.7. Operating Practices.** At all times, the permittee shall operate and maintain the steam boiler, 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 Administrator (Department) that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

**I.8. Tune-Ups.** To demonstrate continuous compliance, the permittee shall conduct a tune-up of the boiler annually as specified in 40 CFR 63.7540. 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 and Table 3.]

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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### I. EU 057 – 300 HP Gas-Fired Boiler

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#### I.9. Details of Tune-Ups.

The permittee shall:

- Inspect the burner, as applicable, and clean or replace any components of the burner as necessary (the burner inspection may be delayed 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;
- 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;
- Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown);
- Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject;
- 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
- Maintain on-site and submit, if requested by the Administrator (Department), an annual report containing the following information:
  - 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;
  - A description of any corrective actions taken as a part of the tune-up; and
  - 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.

[40 CFR 63.7540]

#### Notifications

- I.10. Initial Notification.** The permittee shall submit an Initial Notification to the Department not later than 15 days after the actual date of startup of the steam boiler. Content of the document is specified in 40 CFR 63.9(b)(4) and (5). [40 CFR 63.7545]
- I.11. Notification of Compliance Status.** The permittee shall submit the Notification of Compliance Status within 60 days after completing the initial compliance demonstration. [40 CFR 63.7545(e)]
- I.12. Notification of Alternate Fuel Use.** If the permittee intends to use a fuel other than natural gas during a period of natural gas curtailment or supply interruption, as defined below, the permittee shall submit a notification of alternative fuel use to the Department within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification shall include the following information:
- Company name and address.
  - Identification of the affected unit.
  - Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.
  - Type of alternative fuel that the permittee intends to use.
  - Dates when the alternative fuel use is expected to begin and end.
  - *Period of gas curtailment or supply interruption* means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control

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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### I. EU 057 – 300 HP Gas-Fired Boiler

of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

[40 CFR 63.7545; 40 CFR 63.7575]

**I.13. Changes in Subcategory.** If the permittee switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice to the Department of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:

- The name of the owner or operator of the affected source, the location of the source, the boilers that have switched fuels, were physically changed, and the date of the notice.
- The currently applicable subcategory under 40 CFR 63, Subpart DDDDD.
- The date upon which the fuel switch or physical change occurred.

[40 CFR 63.7545]

#### **Reports**

**I.14. Compliance Reports Schedule.** The permittee shall submit to the Department an annual compliance report as specified below:

- The first compliance report must cover the period beginning on the compliance date (i.e., startup of the boiler) and ending on July 31 or January 31, whichever date is the first date that occurs at least 1 year after the compliance date.
- The first compliance report must be postmarked or submitted no later than January 31.
- Each subsequent compliance report must cover the 1-year period from January 1 to December 31.
- Each subsequent compliance report must be postmarked or submitted no later than January 31.

[40 CFR 63.7550]

**I.15. Compliance Report Content.** The permittee shall submit the compliance report containing the information below:

- 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.
- The total operating time during the reporting period.
- The date of the most recent tune-up for each unit subject to the requirement to conduct an annual tune-up. The date of the most recent burner inspection shall be included if it was not done on an annual period and was delayed until the next scheduled or unscheduled unit shutdown.
- If there are no deviations from the requirements for work practice standards, a statement shall be included that there were no deviations from the work practice standards during the reporting period.
- 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.

[40 CFR 63.7550 and Table 9.]

**I.16. Electronic Submission.** The permittee shall submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the report shall be submitted to the Administrator at the appropriate address listed

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### I. EU 057 – 300 HP Gas-Fired Boiler

in 40 CFR 63.13. At the discretion of the Administrator, the permittee shall also submit these reports to the Administrator in the format specified by the Administrator. [40 CFR 63.7550]

#### **Records**

- I.17. Recordkeeping.** The permittee shall keep the following records: A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report. [40 CFR 63.7555]
- I.18. Alternate Fuels.** If the permittee operates a unit designed to burn gas 1 subcategory and uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR 63 or 40 CFR 60, 40 CFR 61, or 40 CFR 65, the permittee shall keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. [40 CFR 63.7555]
- I.19. Startup and Shutdown.** The permittee shall maintain records of the calendar date, time, occurrence and duration of each startup and shutdown and of the types and amounts of fuels used during each startup and shutdown. [40 CFR 63.7555]
- I.20. Form and Duration.** The permittee records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).
- As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
  - The permittee shall keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). Records can be kept off site for the remaining 3 years.

[40 CFR 63.7560]

#### **Applicability of General Provisions to Subpart DDDDD**

- I.21. General Provisions.** As stated in 40 CFR 63.7565, The permittee shall comply with the applicable General Provisions according to the following:

Citation	Subject	Applies to Subpart DDDDD
§63.9	Notification Requirements	Yes.
§63.10(a), (b)(1)	Recordkeeping and Reporting Requirements	Yes.
§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes.

[40 CFR 63.7565; Table 10]

## SECTION 4. APPENDICES

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