

# Florida Power Development, LLC Brooksville Power Plant

Facility ID No. 0530380

Hernando County

Initial Title V Air Operation Permit

Permit No. 0530380-002-AV



## **Permitting Authority:**

State of Florida

Department of Environmental Protection

Division of Air Resource Management

Office of Permitting and Compliance

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# Initial Title V Air Operation Permit

Permit No. 0530380-002-AV

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**PERMITTEE:**

Florida Power Development, LLC  
10311 Cement Plant Road  
Brooksville, Florida 34601

Permit No.0530380-002-AV  
Brooksville Power Plant  
Facility ID No. 0530380  
Initial Title V Air Operation Permit

The purpose of this permit is to issue the initial Title V air operation permit for the above referenced facility. The existing Brooksville Power Plant is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. UTM Coordinates are: Zone 17, 360.0 kilometers (km) East and 3162.5 km North. Latitude is: 28° 34' 56" North; and, Longitude is: 82° 25' 51" 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.

0530380-002-AV Effective Date: DATE, 20xx  
Renewal Application Due Date: Exp. DATE -225, 20zz  
Expiration Date: Eff. DATE + 5 years, 20zz

(Draft/Proposed)

for Jeffery F. Koerner, Program Administrator  
Office of Permitting and Compliance  
Division of Air Resource Management

JFK/dlr/ttm

## SECTION I. FACILITY INFORMATION.

### **Subsection A. Facility Description.**

The Brooksville Power Plant is an 80 megawatt, gross (MWg) electric power plant. The plant consists of a woody biomass grate suspension boiler; biomass handling and storage; in-duct sorbent injection system (IDSIS); bottom ash storage; and handling facilities; and, fuel oil storage tanks.

The grate-suspension boiler fires woody biomass as the primary and ultralow sulfur distillate (ULSD) fuel oil and natural gas is used for startup, shutdown and bed stabilization. Ammonia (NH<sub>3</sub>) injection into a selective catalytic reduction (SCR) reactor is used to reduce emission of nitrogen oxide (NO<sub>x</sub>) and help in the reduction of organic hazardous air pollutants (HAP) and dioxin/furan (D/F). An oxidation catalyst is used to reduce carbon monoxide (CO), volatile organic compounds (VOC) and organic HAP. An IDSIS utilizing milled trona, lime or sodium bicarbonate to control sulfur dioxide (SO<sub>2</sub>), hydrogen chloride (HCl), hydrogen fluoride (HF) and other acid gas HAP. An electrostatic precipitator (ESP) to reduce emissions of particulate matter (PM)/PM with a mean particle diameter of 10 microns or less (PM<sub>10</sub>)/PM<sub>2.5</sub>, including metal HAP, and to remove injected sorbents. This boiler is equipped with a CO, SO<sub>2</sub> and NO<sub>x</sub> continuous emission monitoring systems (CEMS) and a continuous opacity monitoring system (COMS) for opacity.

### **Subsection B. Summary of Emissions Units.**

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Biomass Handling, Storage and Processing
002	Woody Biomass-Fueled Grate Suspension Boiler
003	Ash Handling, Storage and Shipment
004	IDSIS Sorbent Handling and Storage
<i>Unregulated Emissions Units</i>	
005	Diesel Fired Emergency Generator (610 brake-horse power)
006	150,000 Gallons ULSD-Fuel Oil Storage Tank

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

### **Subsection C. Applicable Regulations.**

Based on the Title V air operation permit renewal application received March 31, 2014, this facility is a major source of HAP. A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A, NSPS General Provisions	002
40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
40 CFR 63, Subpart A, NESHAP General Provisions	
40 CFR 63, Subpart DDDDD: Industrial, Commercial, and Institutional Boilers and Process Heaters	
40 CFR 64, Compliance Assurance Monitoring (CAM)	
40 CFR 96: Clean Air Interstate Rule (CAIR)	
<i>State Rule Citations</i>	
Rule 62-4, F.A.C.: Permits	001 - 004
Rule 62-204.800, F.A.C.: Federal Regulations Adopted by Reference	002

**SECTION I. FACILITY INFORMATION.**

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<b>Regulation</b>	<b>EU Nos.</b>
Rule 62-210, F.A.C.: Stationary Sources – General requirements	001 - 004
Rule 62-212, F.A.C.: Stationary Sources – Preconstruction Review	001 - 004
Rule 62-213, F.A.C.: Operation Permits for Major Sources of Air Pollution	
Rule 62-296, F.A.C.: Stationary Sources – Emission Standards	
Rule 62-297, F.A.C.: Stationary Sources – Emissions Monitoring	

Draft/Proposed

## SECTION II. FACILITY-WIDE CONDITIONS.

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

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

### **Emissions and Controls**

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

**FW3. General VOC Emissions or Organic Solvents Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

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

**FW4. General Visible Emissions.** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

**FW5. Unconfined Particulate Matter.** No person shall cause, let, permit, suffer or allow the emissions of unconfined PM from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Appendix BMP of this permit provides a Best Management Plan (BMP) of reasonable precautions specific to the Brooksville Power Plant facility to control fugitive PM emissions. Reasonable precautions to prevent emissions of unconfined PM at this facility include:

- a. Paving and maintenance of roads and parking areas.
- b. Application of water to control emissions from activities such as demolition of buildings, grading roads, construction, and land clearing.
- c. Application of water to unpaved roads, yards, open stock piles and similar activities.
- d. Scheduled removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment.
- e. Landscaping or planting of vegetation.
- f. Use of hoods, fans, filters and similar equipment to contain, capture and/or vent particulate matter, when possible.
- g. Confining abrasive blasting where possible.
- h. Enclosure or covering of conveyor systems.
- i. Water supply lines, hoses and sprinklers will be located reasonably near all materials and stockpiles.
- j. All plant operators shall be trained in basic environmental compliance and shall perform visual inspections of materials before handling.
- k. Bulk transport trucks leaving the plant shall travel through a tire wash designed to remove particulate matter from the vehicles tires before traveling on the facility’s access roadways.
- l. The main access road leading to the plant shall be cleaned with a mechanical broom sweeper on an as needed basis.

[Rule 62-296.320(4)(c), F.A.C.; Permit No. 0530380-001-AC (PSD-FL-090E); and, Title V permit application received March 31, 2014.]

## SECTION II. FACILITY-WIDE CONDITIONS.

### Annual Reports and Fees

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

**FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 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, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <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.}*

**FW7. Annual Statement of Compliance.** The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit 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.]

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

- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www.epa.gov/osweroe1/content/rmp/index.htm>. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
- b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 001**

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

EU No.	Brief Description
001	Biomass Handling, Storage and Processing

This emission unit consists of the following three primary components:

Biomass Receiving and Conveyance System: The biomass fuel is delivered by truck to the site. The fuel is unloaded by trucks with a self-unloading, walking floor design, to three receiving hoppers and conveyed to a magnetic separator, sizing screen, and mill, for reduction of oversize biomass. The three open hoppers are designed to receive 150 tons per hour (TPH) of biomass fuel. A conveyor will be used to transfer the woody biomass fuel from the unloading area to a covered conveyor system and then sent to the biomass (fuel) storage pile.

Biomass Storage Pile: The fuel storage pile is designed to accommodate approximately 40,000 tons of biomass fuel at a nominal 60 feet in height. The fuel pile is managed using a combination of automated stackers and mobile equipment, such as front-end loaders.

Biomass Boiler Feed System: From the fuel storage pile, the fuel is unloaded by three reclaim hoppers. Each reclaim hopper is designed to process 100 TPH of biomass. Covered conveyors controlled by fabric or bin vent filters are used to reduce emission of PM. The fuel is then transferred to an enclosed building containing a sizing screen, magnetic separator and hog mill designed to process 200 TPH of biomass fuel. A baghouse will be used to control emissions of PM. The biomass fuel will be conveyed to the grate suspension boiler day bins to provide biomass fuel to the boiler at a design rate of 200 TPH.

*{Permitting Note: This emissions unit is regulated under Rules 62-210.300 (Permits Required) and 62-296.320 (General Pollutant Emission Limiting Standards), F.A.C.}*

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

- A.1. Design Capacity.** The woody biomass storage area shall be designed for approximately 40,000 tons of woody biomass at a height of approximately 60 feet. Biomass placed in the pile will be largely managed by mechanical means. The storage pile shall be on level, impervious ground and contoured to minimize wind erosion. The biomass in the pile shall be managed on a first-in-first-out basis. The biomass will then be taken by covered conveyors to the boiler day bins and from there to the grate-suspension boiler. Wet suppression shall only be used as necessary to control fugitive dust emissions otherwise it shall be maintained dry for use as a fuel. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- A.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- A.3. Methods of Operation – Fuels.** The fuel to be received, handled, stored and processed shall consist of woody biomass as defined in the Appendix BMP of this permit. Municipal Solid Waste (MSW), other than pre-processed yard waste, is prohibited from use at this facility. Inspection and testing procedures described in Appendix BMP shall be followed to ensure that appropriate woody biomass is used as fuel and that prohibited MSW is not used as fuel. [Rules 62-204.800, F.A.C.; NSPS Subpart Eb of 40 CFR 60.51b. (Definitions); and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- A.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C., and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Control Technology**

- A.5. Baghouse (A-Conveyor):** Based on the preliminary design, the permittee shall operate and maintain a baghouse to control PM emissions from the sizing screen, magnetic separator and hog mill enclosure. The baghouse shall be designed and maintained to achieve an outlet dust loading rate of 0.02 grains per dry standard cubic feet (gr/dscf) in its exhaust. Based on the final engineering design needs, additional baghouses

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 001**

may be installed as necessary to control fugitive dust from biomass handling, storage and processing emission unit. The Compliance Authority shall be notified 180 days before Brooksville Power Plant becomes operational of any final engineering design changes. Should the preliminary design change, the permittee shall provide final design details for all baghouses in the application for a Title V air operation permit along with a concurrent modification of this air construction permit. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

Unless otherwise specified, the averaging times for Specific Conditions **A.6** and **A.7** are based on the specified averaging time of the applicable test method.

**A.6. Fugitive Visible Emissions.** As determined by EPA Method 9, visible emissions shall not exceed 10% opacity, except for one 6 minute period no greater than 20% from the outlets of the drop points, transfer points, vent screens and dust collectors associated with this emission unit. [Permit No. 0530380-001-AC (PSD-FL-090E)]

**A.7. Baghouse (A-Conveyor) Visible Emissions.** As determined by EPA Method 9, visible emissions from the baghouse shall not exceed 5% opacity. [Permit No. 0530380-001-AC (PSD-FL-090E)]

**Monitoring of Operations**

**A.8. Best Management Practices (BMP) Plan.** A BMP plan shall be utilized to minimize fugitive PM emissions from biomass handling, storage and processing of woody biomass. BMP shall be utilized to reduce the potential for spontaneous combustion of stored woody biomass and odors. The BMP plan is contained in Appendix BMP of this permit. This plan also includes quality assurance and quality control (QA/QC) procedures to ensure woody biomass delivered by vendors and suppliers to the Brooksville Power Plant facility meet the requirements given in the BMP plan.

*{Permitting Note: PM emissions from this emissions unit during operation of the Brooksville Power Plant facility are estimated to be approximately 4.6 tons in any consecutive twelve month period; of this amount approximately 0.9 tons are PM<sub>10</sub>.}*

[Rule 62-296.320, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

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

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

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

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

**A.11. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the outlets of the drop points, transfer points, the silo vent screens associated with the fuel bins and the baghouses

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection A. Emissions Unit 001

of this emissions unit shall be tested to demonstrate compliance with the emissions standards for opacity. The annual compliance test shall be used in lieu of the compliance tests prior to renewal. [Rule 62-297.310(7)(a)4, F.A.C.]

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

**A.12. Test Reports.** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR, Facility-Wide Testing Requirements of this permit. **For each test run, the report shall also indicate the overall biomass feed rate to the boiler during the period of testing.**

[Rule 62-297.310(8), F.A.C.]

**A.13. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 002**

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

EU No.	Brief Description
002	Woody Biomass-Fueled Grate Suspension Boiler

The existing woody biomass fueled grate-suspension boiler with water-cooled movable grates generates up to 80 MWg of electricity in an existing steam electric generator. The primary fuel is clean woody biomass. ULSD fuel oil and natural gas will be used for startup, shutdown and bed stabilization of the grate-suspension boiler. The maximum heat input capacity of this boiler is 900 million British thermal units/hour (MMBtu/hour) (4-hour average basis). The steam production capability is approximately 490,000 pounds per hour (lb/hour) at 1,887 pounds per square inch (psi) and 950 degrees Fahrenheit (°F).

Efficient combustion of woody biomass in the grate-suspension boiler to minimize formation of PM, NO<sub>x</sub>, CO and VOC; limitation of biomass to woody biomass to minimize SO<sub>2</sub> and HAP formation; use of an inherently clean fuels for startup, shutdown and bed stabilization; a oxidation catalyst to further control CO, VOC, and HAP; NH<sub>3</sub> injection into SCR reactor to destroy NO<sub>x</sub> and help in the reduction of VOC, HAP and D/F; an IDISIS to further control SO<sub>2</sub> and acid gas HAP, including HCl and HF; and, an ESP with a design efficiency of 99.9% to further control PM and visible emissions, (i.e. opacity) and remove injected sorbents.

The stack is 12 feet in diameter and 165 feet tall. Exhaust flue gas will exit the stack at the following approximate conditions: an exit temperature of 334 °F and a volumetric flow rate of 312,668 actual cubic feet per minute (acfm).

Emissions of CO, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> are monitored and recorded by CEMS. Opacity is monitored and recorded by a COMS.

*{Permitting Note: This emission unit is regulated under NSPS Subpart Db, Industrial-Commercial-Institutional Steam Generating Units, for modified units, and NESHAP Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, for existing units, adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 62-212.400(Avoid PSD), F.A.C., PSD; Rule 62-296.406, Fossil Fuel Steam Generators with Less Than 250 MMBtu/hour Heat Input; 40 CFR 64, CAM, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and, Rule 62-296.470, F.A.C., CAIR.}*

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

**B.1. Permitted Capacity.** The maximum allowable heat input rate is as follows:

<u>MMBtu/hour Heat Input</u>	<u>Compliance Duration</u>	<u>Fuel Type</u>
900	4-hour average	All Fuel Combinations
< 250	1-hour	ULSD and Natural Gas, and in Combination

The permittee shall use the thermal efficiency method to calculate the boiler heat input rate, using the steam rate, steam pressure, and steam temperature measurements required per Condition **B.34**, and feedwater temperature and pressure, to determine net enthalpy. The design boiler efficiency shall be used provided the boiler efficiency test required in Condition **B.33** is at least 90% of the design boiler efficiency. The procedure given in Appendix ASME of this permit shall be used to measure the boiler efficiency. As an alternative, the procedures given in Appendix F of this permit may be used to calculate boiler heat input.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

*{Permitting Note: The maximum heat input capacity to combust ULSD fuel oil and natural gas singly or in combination in the grate-suspension boiler, as determined by the physical design and characteristics of the boiler burners, shall be less than 250 MMBtu/hour to meet the exemption requirements of NSPS, Subpart Da.}*

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

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 002

#### **B.3. Methods of Operation.**

- a. Fuels. The fuels that are allowed to be burned in this unit are:
  - (1) Clean Woody Biomass, primary fuel,
  - (2) ULSD fuel oil and natural gas for startup, shutdown and bed stabilization.
- b. Other. Supplemental injection of lime, milled trona or sodium bicarbonate into the grate-suspension boiler duct work to control SO<sub>2</sub> and HAP acid gas emissions. The sorbent injection rate shall be adjusted as necessary (lb/hour) to control SO<sub>2</sub> emissions.  
[Rules 62-210.800, 62-213.410, and 62-296.410, F.A.C.; Applicant's request in Title V permit application received March 31, 2014; NSPS Subpart Db of 40 CFR 60; and, Permit No. 0530380-001-AC]

#### **B.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C., and, Permit No. 0530380-001-AC (PSD-FL-090E)]

#### **Control Technology**

- B.5. Electrostatic Precipitator.** The permittee shall operate and maintain an ESP to control PM and visible emissions. The ESP shall be designed to achieve the PM emissions standards specified in this subsection. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.6. Selective Catalytic Reduction System.** The permittee shall operate and maintain an NH<sub>3</sub>-based SCR system including reagent storage tank, pumps, metering system, injection grid, reactor and catalyst to reduce NO<sub>x</sub> emissions in the flue gas exhaust and achieve the NO<sub>x</sub> emissions standards specified in this subsection. The SCR shall be brought on line and functioning properly whenever the boiler is in operation in accordance with the manufacturer's procedures and guidelines. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.7. In-Duct Sorbent Injection System.** An IDSIS shall consist of the pumps, the metering and injection equipment required to inject the sorbent (lime, milled trona or sodium bicarbonate) into the grate-suspension boiler duct work to control SO<sub>2</sub> and HAP acid gas emissions. The sorbent injection rate shall be adjusted as necessary (lb/hour) to control SO<sub>2</sub> emissions to the standard specified in this subsection. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.8. Oxidation Catalyst.** The permittee shall operate and maintain an oxidation catalyst to control CO and VOC emissions to the emission standards specified in this section. The oxidation catalyst will also help control organic HAP emissions. [Permit No. 0530380-001-AC(PSD-FL-090E) ]
- B.9. Circumvention.** The permittee shall not circumvent the air pollution control equipment or allow the emissions of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

#### **Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

Unless otherwise specified, the averaging times for Specific Conditions **B.10 – B.19** are based on the specified averaging time of the applicable test method.

#### **B.10. Carbon Monoxide Emissions.**

- a. As determined by CEMS, CO emissions shall not exceed 40.5 lb/hour based on a 12-month rolling average (rolled monthly). *{Permitting Note: For informational purposes, the CO limit equates to 0.045 lb/MMBtu and 177.4 tons/year.}* [Rule 62-212.400(Avoid PSD), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- b. ***Future Effective Date of 1/31/2016:*** As determined by CEMS, CO emissions shall not exceed 2,000 ppmvd at 3% O<sub>2</sub> (10-day rolling average) except during startup and shutdown. [NESHAP Subpart DDDDD of 40 CFR 63 (Table 2)]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 002

#### B.11. Nitrogen Oxide Emissions.

- a. As determined by CEMS, NO<sub>x</sub> emissions shall not exceed 135 lb/hour based on a 12-month rolling average (rolled monthly). *{Permitting Note: For informational purposes, the NO<sub>x</sub> limit equates to 0.15 lb/MMBtu and 591.3 tons/year.}* [Rule 62-212.400(Avoid PSD), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- b. As determined by CEMS, NO<sub>x</sub> emissions shall not exceed 0.20 lb/MMBtu based on a 30-day rolling average. *{Permitting Note: For informational purposes, the NO<sub>x</sub> limit equates to 180 lb/hour.}* [NSPS Subpart Db of 40 CFR 60.44b]

#### B.12. Sulfur Dioxide Emissions. As determined by CEMS, SO<sub>2</sub> emissions shall not exceed 135 lb/hour based on a 12-month rolling average (rolled monthly). *{Permitting Note: For informational purposes, the SO<sub>2</sub> limit equates to 0.15 lb/MMBtu and 591.3 tons/year. SO<sub>2</sub> emissions are less than 0.32 lb/MMBtu; therefore, no specific limit applies per NSPS Subpart Db of 40 CFR 60.42b(k)(2).}* [Rules 62-212.400(Avoid PSD) and 62-296.406(3)(BACT), F.A.C.; NSPS Subpart Db of 40 CFR 60.42b; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

#### B.13. Particulate Matter Emissions.

- a. As determined by Method 5, 5B or 17, each annual calendar year, PM/PM<sub>10</sub> emissions shall not exceed 11.7 lb/hour. *{Permitting Note: For informational purposes, the PM/PM<sub>10</sub> limit equates to 0.013 lb/MMBtu of filterable PM.}* [Rules 62-212.400(Avoid PSD) and 62-296.406, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- b. As determined by stack test, PM/PM<sub>10</sub> emissions shall not exceed 0.03 lb/MMBtu. *{Permitting Note: Test data per Condition B.13.a can be used to meet this requirement.}* [NSPS Subpart Db of 40 CFR 60.43b and 60.46b]
- c. **Future Effective Date of 1/31/2016:** As determined by stack test, PM (filterable) emissions shall not exceed 0.051 lb/MMBtu of heat input; or, total selected metals (TSM) of 0.0065 lb/MMBtu of heat input except during startup and shutdown. Alternative out-put based limit of 0.052 lb/MMBtu of steam output or 0.71 lb/MWh; or, TSM of 0.0066 lb/MMBtu of steam output or 0.091 lb/MWh. The sampling volume shall be at a minimum of 2 dry standard cubic feet per minute (dscm) per run. *{Permitting Note: Test data per Condition B.13.a can be used to meet this requirement if the sampling volume is at a minimum of 2 dscm/run.}* [NESHAP Subpart DDDDD of 40 CFR 63 (Table 2)]

#### B.14. Volatile Organic Compounds Emissions. As determined by stack test, VOC emissions shall not exceed 9 lb/hour. *{Permitting Note: For informational purposes, the VOC limit equates to 39.4 tons/year.}* [Rule 62-212.400(Avoid PSD), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

#### B.15. Sulfuric Acid Mist (SAM) Emissions. As determined by stack test, SAM emissions shall not exceed 2.2 lb/hour. *{Permitting Note: For informational purposes, the SAM limit equates to 9.5 tons/year.}* [Rule 62-212.400(Avoid PSD), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

#### B.16. Hydrogen Chloride. (**Future Effective Date of 1/31/2016**) As determined by Method 26 or 26A, HCl emissions shall not exceed 0.022 lb/MMBtu of heat input except during startup and shutdown. Alternative out-put based limit of 0.025 lb/MMBtu of steam output or 0.27 lb/MWh except during startup and shutdown. The sampling volume shall be at a minimum of 1 dscm per run for Method 26A or 120 liters/run for Method 26. [NESHAP Subpart DDDDD of 40 CFR 63 (Table 2)]

#### B.17. Mercury (Hg). (**Future Effective Date of 1/31/2016**) As determined by EPA Method 29, Hg emissions shall not exceed 5.7E-06 lb/MMBtu of heat input except during startup and shutdown. Alternative out-put based limit of 6.4E-06 lb/MMBtu of steam output or 7.3E-05 lb/MWh. Based on the method specified, the sampling volumes shall be at a minimum of 3 dscm per run for Method 29. [NESHAP Subpart DDDDD of 40 CFR 63 (Table 2)]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 002

- B.18. Ammonia Slip.** As determined by CTM-027, NH<sub>3</sub> slip emissions shall not exceed 10 ppmvd at 7% O<sub>2</sub>. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.19. Visible Emissions.** As determined by COMS, visible emissions shall not exceed 10% opacity. During startups, shutdowns and malfunctions, visible emissions shall not exceed 20% opacity (6-minute blocks) except for one 6-minute block/hour of 27% opacity. [Rule 62-204.800 and 62-296.406, F.A.C.; NSPS Subpart Db of 40 CFR 60.43b; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

#### Excess Emissions

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

- B.20. Excess Emissions Allowed – Opacity Requirements.** During startup, shutdown and malfunctions, the stack opacity shall not exceed 20% based on 6-minute block averages, except for one 6-minute block/hour that shall not exceed 27% opacity. *{Permitting Note: As provided by the authority in Rule 62-210.700(5), F.A.C., this condition supersedes the provisions in Rule 62-210.700(1), F.A.C.}* [Rule 62-210.700(5), and 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.21. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.22. Emission Limit Compliance and Excess Emission:** Because of the long-term nature of all of the SO<sub>2</sub>, NO<sub>x</sub>, and CO CEMS-based mass emission rate (i.e. lb/hour) limits, all emissions data for these pollutants, including periods of startup, shutdown and malfunction, shall be included in any compliance determinations based on CEMS data. [Rules 62-4.070(3), 62-210.200(PTE) and 62-210.700(4), F.A.C.]
- B.23. Malfunction Notifications:** In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority. 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. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction. [Rules 62-4.130 and 62-210.700(6), F.A.C. ; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.24. Operating Procedures:** The emission standards established by this permit rely on "good combustion practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the steam generating unit and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good combustion practices as well as methods of minimizing excess emissions. [Permit No. 0530380-001-AC (PSD-FL-090E)]

#### Monitoring of Operations

- B.25. CAM Plan.** This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]
- B.26. Fossil Fuel Quantity Limit:** Flow meters shall be installed to record the amount of ULSD fuel oil in gallons and natural gas in standard cubic feet (scf) that is fired in the fossil fuel burners in the grate-

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 002

suspension boiler. The maximum amount of fossil fuels (ULSD fuel oil and natural gas) that shall be fired in the boiler in any 12-month consecutive period is limited by the equation given below.

$$140,000,000 = (22.454 \times \text{FO}_{\text{gal}}) + (0.12 \text{ lb} \times \text{NG}_{\text{scf}})$$

Where:

$\text{FO}_{\text{gal}}$  = Gallons (gal) of fuel oil (FO) burned in any consecutive 12 months.

$\text{NG}_{\text{scf}}$  = Standard cubic feet of natural gas (NG) burned in any consecutive 12 months.

[Rules 62-204.800 and 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**B.27. Operating Parameters:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain continuous monitoring and recording devices for the following parameters: steam temperature (°F), steam pressure (psig), steam production rate (lb/hour) and heat rate (4 hour averages). Records shall be maintained on site and made available upon request. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**B.28. SCR Ammonia Injection:** In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a flow meter to measure and record the ammonia injection rate for the SCR system for the steam generating unit. The permittee shall document the general range of  $\text{NH}_3$  flow rates required to meet the  $\text{NO}_x$  standard over the range of load conditions by comparing  $\text{NO}_x$  emissions with ammonia flow rates. During  $\text{NO}_x$  CEMS downtimes or malfunctions, the permittee shall operate at an  $\text{NH}_3$  flow rate that is consistent with the documented flow rate for the given load condition. Records shall be maintained on site and made available upon request. [Permit No. 0530380-001-AC (PSD-FL-090E)]

#### **Continuous Emissions Monitoring Requirements**

**B.29. Continuous Monitoring Requirements:** The permittee shall calibrate, maintain and operate CEMS and a diluent monitor to measure and record the emissions of  $\text{SO}_2$ ,  $\text{NO}_x$  and CO from the boiler stack in a manner sufficient to demonstrate continuous compliance with the CEMS-based emission standards in Conditions **B.10 – B.12** above (see Appendix CEMS for further information). The permittee shall calibrate, maintain and operate COMS to measure and record the opacity to demonstrate compliance with the COMS-based emission standard in Condition **B.19** above. Within one working day of discovering emissions in excess of the CEMS or COMS based  $\text{SO}_2$ ,  $\text{NO}_x$ , CO and opacity standard, the permittee shall notify the Compliance Authority.

- a.  **$\text{SO}_2$  CEMS.** The  $\text{SO}_2$  CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. All data shall be reduced to 1-hour averages.
- b.  **$\text{NO}_x$  CEMS.** The  $\text{NO}_x$  CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR Part 75. Recordkeeping and reporting shall be conducted pursuant to Subpart Db in 40 CFR 60, and Subparts F and G of 40 CFR 75. All data shall be reduced to 1-hour averages. The  $\text{NO}_x$  monitor span values shall be set in accordance with Section 2.1.2 in Appendix A of 40 CFR 75. When  $\text{NO}_x$  emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 or 7A of appendix A of 40 CFR 60, to provide emission data for a minimum of 75% of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- c. **CO CEMS.** The CO CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 (I.e. quarterly gas audits per 40 CFR 60 Appendix F) shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The relative accuracy testing audits (RATA) tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60. All data shall be reduced to 1-hour averages. The CO monitor span values shall be set, considering the allowable methods of operation and

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 002**

corresponding emission standards.

- d. **COMS.** In accordance with 40 CFR 60.48b(a) the permittee shall install, calibrate, operate and maintain a COM to continuously monitor and record opacity from the steam generating unit. The COMS shall be certified pursuant to 40 CFR 60 Appendix B, Performance Specification 1. All data shall be reduced to 6-minute averages. For combusting wood, the COMS span values shall be set between 60 and 80%.
- e. **Diluent Monitor.** The O<sub>2</sub> or CO<sub>2</sub> content of the flue gas shall be monitored at the location where SO<sub>2</sub>, CO and NO<sub>x</sub> are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rule 62-204.800, F.A.C.; NSPS Subpart A and Db of 40 CFR 60; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**B.30. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1 - 4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content <i>{Note: Methods shall be performed as necessary to support other methods.}</i>
5, 5B, 17	Method for Determining PM Emissions (All PM is assumed to be PM <sub>10</sub> .)
6C	Measurement of SO <sub>2</sub> Emissions (Instrumental)
7, 7A, 7E	Determination of NO <sub>x</sub> Emissions from Stationary Sources
8	Determination of Sulfuric Acid and SO <sub>2</sub> Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of CO Emissions from Stationary Sources <i>{Note: The method shall be based on a continuous sampling train.}</i>
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography <i>{For concurrent use with EPA Method 25A to deduct emissions of methane and ethane from the total hydrocarbon emissions measured by Method 25A.}</i>
19	Determination of SO <sub>2</sub> Removal Efficiency and PM, SO <sub>2</sub> , and NO <sub>x</sub> Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
25	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
26, 26A	Method for Determining HCl, Halides, Halogens
29	Method for Determining Metal Emissions
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Method CTM-027 is published on EPA's Technology Transfer Network Web Site at <http://www.epa.gov/ttn/emc/ctm.html>. No other methods may be used unless prior written approval is

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**Subsection B. Emissions Unit 002**

received from the Department. [Rules 62-204.800 and 62-297.401, F.A.C., 40 CFR 60; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

- B.31. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.32. Annual Compliance Tests.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the boiler stack shall be tested to demonstrate compliance with the emissions standards for NH<sub>3</sub> slip and PM. (***Future Effective Date of 1/31/2016***) During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the boiler stack shall be tested to demonstrate compliance with the emissions standards for NH<sub>3</sub> slip, PM, HCl and Hg. Tests shall be conducted between 90 and 100% of the maximum heat input rate when firing only the primary fuels. CEMS data for SO<sub>2</sub>, CO and NO<sub>x</sub> along with COMS data for opacity shall be reported for each run of the required tests for NH<sub>3</sub> slip and PM. The annual compliance tests for NH<sub>3</sub> slip and PM may be used in lieu of the compliance test prior to renewal. [Rules 62-210.300(2)(a) and 62-297.310(7), F.A.C.]
- B.33. Boiler Performance Test.** The boiler thermal efficiency test shall be repeated during the 12-month period prior to renewal of any operation permit. The test shall be conducted in general accord with ASME PTC 4, 1998. See Appendix ASME of this permit. The abbreviated test procedure shall be agreed upon by all parties. The test shall be conducted for at least three hours when firing only the fuels types with heating values representative of the boiler design fuel as practical. The boiler steam conditions and production rate shall be monitored and recorded during the test. The primary fuel firing rate (in tons/hour, gallons/hour or cubic feet/hour as appropriate) shall be calculated and recorded based on the steam parameters. Samples of the as-fired biomass shall be analyzed for the heating value (Btu/lb) and moisture content (%). The actual heat input rate (MMBtu/hr) shall be determined using the method given in Condition **B.34** below. Results of the test shall be submitted to the Compliance Authority within 45 days of completion. The boiler thermal efficiency test shall be repeated during the 12-month period prior to renewal of any operation permit. If the tested boiler thermal efficiency is less than 90% of the design boiler thermal efficiency, then the tested thermal efficiency shall be used in any future calculations of the heat input rate until a new test is conducted. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.34. Boiler Heat Input Rate Calculation.** The permittee shall use one of the following methods to determine the heat input rate to the biomass boiler:
- a. *Design Thermal Efficiency*, the boilers' design thermal efficiency along with steam production and steam characteristics can be used if actual tested thermal efficiency is within 90% of the design value.
  - b. *Actual Tested Thermal Efficiency*, the actual tested thermal efficiency must be used if this level is less than 90% of the design value. The procedure given in Appendix ASME of this permit shall be used to measure the boiler efficiency
  - c. *Alternative Method*, in lieu of the procedures given in Appendix ASME, the procedures given in Appendix F of this permit may be used to calculate boiler heat input. If used, Section 5 of Appendix F of 40 CFR 75 provides a methodology for calculation of the heat input rate to a boiler using F-Factors. The applicable portions of 40 CFR 75 for the calculation of the heat input rate to the biomass boiler at the Florida Power Development facility is contained in Appendix F of 40 CFR 75. This procedure may be used to calculate the heat input rate in MMBtu/hr to the biomass boiler.
- [Permit No. 0530380-001-AC (PSD-FL-090E)]

**Recordkeeping and Reporting Requirements**

- B.35. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 002**

Quarterly SO <sub>2</sub> , CO, NO <sub>x</sub> and Opacity Emissions Report	Quarterly	B.38.
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[Rule 62-213.440(1)(b), F.A.C.]

- B.36. Monthly Operations Summary:** By the tenth calendar day of each month, the permittee shall record the following for each fuel used in the biomass boiler in a written or electronic log for the previous month of operations: hours of operation; tons of clean woody biomass, gallons of ULSD fuel oil; millions of scf of pipeline natural gas; pounds of steam/month; total heat input rate; and the updated 12-month rolling totals for each of these operating parameters. In addition, the 4-hour average heat input rate to the biomass boiler shall be recorded and reported. The Monthly Operations Summary shall be maintained on site and made available for inspection when requested by the Department. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.37. Stack Test Reports:** In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: steam production rate (lb/hour), heat input rate (MMBtu/hour), calculated fuel firing rate (tons/hour, gallons/hour and millions of scf/hour as appropriate) and emission rates (NH<sub>3</sub> slip in ppmvd @ 7% O<sub>2</sub>; PM, VOC, SAM and in lb/hour). SO<sub>2</sub>, CO and NO<sub>x</sub> CEMS data along with COMS opacity data during stacking testing shall also be included the each stack test report. [Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.38. Quarterly SO<sub>2</sub>, CO, NO<sub>x</sub> and Opacity Emissions Report:** Within 30 days following the end of each quarter, the permittee shall submit a report to the Compliance Authority summarizing SO<sub>2</sub>, CO, NO<sub>x</sub> and opacity emissions including periods of startups, shutdowns, malfunctions, and CEMS and COMS systems monitor availability for the previous quarter. If opacity COMS data is excluded from a compliance determination during the quarter due to a malfunction, the permittee shall include a description of the malfunction, the actual emissions recorded, and the actions taken to correct the malfunction in the quarterly report. After the first full four quarters of operation, the permittee may request approval from the Compliance Authority to submit these reports on a semiannual basis. See Figure 1 in 40 CFR 60.7(d) for reporting format. [Rules 62-4.130, and 62-210.400(5)(c), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- B.39. Fuel Records.** The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for ULSD fuel oil, natural gas, and wood for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [Rule 62-204.800, F.A.C.; and, NSPS Subpart Db of 40 CFR 60.49b]
- B.40. NO<sub>x</sub> Emissions Records.** The permittee shall maintain records of the following information for each steam generating unit operating day:
- a. Calendar date;
  - b. The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (lb/MMBtu heat input) measured or predicted;
  - c. The 30-day average NO<sub>x</sub> emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO<sub>x</sub> emission rates for the preceding 30 steam generating unit operating days;
  - d. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards in **Condition B.11.b**, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - g. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
  - h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection B. Emissions Unit 002

- j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of 40 CFR 60.  
[Rule 62-204.800, F.A.C.; and, NSPS Subpart Db of 40 CFR 60.49b]

**B.41. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

#### **Other Requirements**

**B.42. NSPS Subpart Db.** The biomass boiler must meet all applicable requirements of NSPS 40 CFR 60, Subpart Db – Industrial-Commercial-Institutional Steam Generating Units as identified in the appendices. For the biomass boiler, NSPS Subpart Db contains limits for SO<sub>2</sub>, NO<sub>x</sub>, PM and opacity. [NSPS Subpart Db of 40 CFR 60; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**B.43. NESHAP Subpart DDDDD.** (*Future Effective Date of 1/31/2016*) The biomass boiler must meet all applicable requirements of NESHAP 40 CFR 63, Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters for major sources of HAP as identified in the appendices. For the biomass boiler, NESHAP Subpart DDDDD contains emission limits for CO, PM, HCl, and Hg. [NESHAP Subpart DDDDD of 40 CFR 63; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 003**

**Subsection C. The specific conditions in this section apply to the following emissions units:**

<b>EU No.</b>	<b>Brief Description</b>
003	Ash Handling, Storage and Shipment

The combustion of biomass in the converted boiler will result in the formation of bottom and fly ash. Bottom ash is collected from the boiler by a submerged drag-chain conveyor, which delivers the wet ash to a storage area. The storage area is located on a level and impervious surface surrounded on three sides by retaining walls. The bottom ash is handled in the storage area using mechanical means such as front-end loaders. The bottom ash will be sent daily to the co-located cement plant for use in its kilns or shipped off site for disposal.

The fly ash handling system consists of enclosed hoppers, drop points and conveyors associated with the collection and transfer of fly ash to two storage bins from the ESP. The ESP is used to control emissions of PM from the biomass boiler. An enclosed conveyor is used to transport the fly ash from the ESP to the ash storage bins. The storage bins are equipped with a bin vent filters to minimize any PM emissions from the transfer operations. The fly ash shipment system consists of drop points and chutes associated with the transfer of the fly ash from the storage bins to trucks for shipment to the co-located cement plant for use in its kilns or for removal of the ash off-site.

*{Permitting Note: This emission unit is regulated under Rule 62-210.300, Permits Required; and Rule 62-212.400(Avoid PSD), F.A.C., PSD.}*

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

- C.1. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- C.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Control Technology**

- C.3. Air Pollution Control Equipment.** To comply with the emission standards of this subsection, the permittee shall operate the following air pollution control equipment on the ash (fly and bottom) handling, storage and shipment emission unit.
  - a. *Enclosures and Dust Collectors.* To minimize fugitive PM, bottom and fly ash conveyors shall be covered. Where practical, dust collectors shall be operated on the bottom ash and fly ash transfer points, drop points, hoppers and chutes.
  - b. *Fly Ash Storage Bins.* Bin vent filters shall be installed and maintained to remove PM from the fly ash storage bins exhaust.
  - c. *Bottom Ash Storage Area.* The procedures described in the BMP plan provided in Appendix BMP of this permit regarding the bottom ash storage area shall be followed to minimize fugitive dust emissions and odors from the bottom ash storage area.
  - d. *Dust Collectors, Bin Vent Filters and Baghouses.* Dust collectors, bin vent filters and baghouses shall be designed to achieve a PM emission rate of 0.020 gr/dscf or less. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

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

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 003**

**C.4. Visible Emissions.** As determined by EPA Method 9, visible emissions shall not exceed 10% opacity, except for one, 6-minute period no greater than 20% from the bottom and fly ash conveyors, transfer points, drop points, hoppers, chutes and dust collectors. Visible emissions shall not exceed 5% opacity from the ash storage bin vent filters. [Rule 62-212.400(5)(c), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Excess Emissions**

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

**C.5. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

**C.6. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

**Monitoring of Operations**

**C.7. Best Management Practices to Control Unconfined Emissions of PM:** To ensure the emission standards with regard to opacity and PM of this subsection are complied with, the procedures set forth in Condition **FW5.** of Section II of this permit, "Unconfined Emissions of Particulate Matter," shall be adhered to where practical and cost effective. In addition, the procedures set forth in Appendix BMP of this permit with regard to fugitive emissions shall be adhered to. [Rules 62-4.070(Reasonable Assurance) and 62-296.320, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**C.8. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

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

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

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

**C.10. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the bottom and fly ash conveyors, transfer points, drop points, hoppers, chutes and dust collectors and ash storage bins vent filters associated with this emission unit shall be tested to demonstrate compliance with the emission standards for opacity. The annual compliance tests for visible emissions may be used in lieu of the compliance test prior to renewal. [Rules 62-210.300(2)(a) and 62-297.310(7), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection C. Emissions Unit 003**

**Recordkeeping and Reporting Requirements**

- C.11. Dust Collector Design Specification:** To demonstrate compliance with the dust outlet loading specification, the permittee shall maintain records from the vendor.  
[Permit No. 0530380-001-AC (PSD-FL-090E)]
- C.12. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection D. Emissions Unit 004**

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

EU No.	Brief Description
004	IDSIS Sorbent Handling and Storage

To control acid gas emissions from the boiler, consisting primarily of SO<sub>2</sub>, HCl and hydrogen fluoride (HF), an IDSIS is used. In this system, sorbent (hydrated lime, milled trona or sodium bicarbonate) is injected in the flue gas duct work prior to the ESP. A sorbent loading system consisting of enclosed hoppers and covered conveyors associated with the transfer of the sorbent to two storage bins. The two storage bins are equipped with bin vent filters to control emissions of PM. The sorbent conveyance system consists of an enclosed pneumatic conveyor to transport the sorbent from the storage bins to the flue gas duct work upstream of the ESP. The conveyance system also includes the necessary nozzles and metering equipment required to inject the sorbent into the duct work. The spent sorbent is collected from the ESP when the fly ash is collected. The sorbent is disposed of with the fly ash.

*{Permitting Note: This emission unit is regulated under Rule 62-210.300, Permits Required; and Rule 62-212.400(Avoid PSD), F.A.C., PSD}*

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

- D.1. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]
- D.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Control Technology**

- D.3. Air Pollution Control Equipment:** To comply with the emission standards of this subsection, the permittee shall operate the following air pollution control equipment on IDSIS sorbent handling and storage emission unit.
  - a. *Enclosures and Dust Collectors.* To minimize fugitive PM, sorbent conveyors shall be covered. Where practical, dust collectors shall be installed on the sorbent transfer points, drop points, hoppers and chutes.
  - b. *Sorbent Storage Bins.* Bin vent filters shall be installed and maintained to remove PM from the sorbent storage bins exhaust. The vent filters shall be installed and operational before the storage bins are operated.
  - c. *Dust Collectors, Bin Vent Filters and Baghouses.* Dust collectors, bin vent filters and baghouses shall be designed to achieve a PM emission rate of 0.020 gr/dscf or less.  
[Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

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

- D.4. Visible Emissions.** As determined by EPA Method 9, visible emissions shall not exceed 10% opacity, except for one 6 minute period no greater than 20% from the sorbent conveyors, transfer points, drop points, hoppers, chutes and dust collectors. As determined by EPA Method 9, there shall be no visible emissions greater than 5% opacity from the bin vent filters. [Rule 62-212.400(5)(c), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection D. Emissions Unit 004**

**Excess Emissions**

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

**D.5. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

**D.6. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

**Monitoring of Operations**

**D.7. Best Management Practices to Control Unconfined Emissions of PM:** To ensure the emission standards with regard to opacity and PM of this subsection are complied with, the procedures set forth in Condition **FW5.** of Section II of this permit, "Unconfined Emissions of Particulate Matter," shall be adhered to where practical and cost effective. In addition, the procedures set forth in Appendix BMP of this permit with regard to fugitive emissions shall be adhered to. [Rules 62-4.070(Reasonable Assurance) and 62-296.320, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**D.8. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

<b>Method</b>	<b>Description of Method and Comments</b>
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

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

**D.10. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the sorbent ash conveyors, transfer points, drop points, hoppers, chutes and dust collectors and sorbent bins vent filters associated with this emission unit shall be tested to demonstrate compliance with the emission standards for opacity. The annual compliance tests for visible emissions may be used in lieu of the compliance test prior to renewal. [Rules 62-210.300(2)(a) and 62-297.310(7), F.A.C.; and, Permit No. 0530380-001-AC (PSD-FL-090E)]

**Recordkeeping and Reporting Requirements**

**D.11. Dust Collector Design Specification:** To demonstrate compliance with the dust outlet loading specification, the permittee shall maintain records from the vendor. [Permit No. 0530380-001-AC (PSD-FL-090E)]

**D.12. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**SECTION IV. CAIR PART.**  
**Clean Air Interstate Rule Provisions**

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**Clean Air Interstate Rule (CAIR).**

**Operated by:** Florida Power Development, LLC

**Plant:** Brooksville Power Plant

**ORIS Code:** 10333

The emissions unit below is regulated under the Clean Air Interstate Rule.

<b>EU No.</b>	<b>EPA Unit ID#</b>	<b>Brief Description</b>
002	2	Woody Biomass-Fueled Grate Suspension Boiler

1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated 06/25/2014, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]



**SECTION IV. CAIR PART.**  
**Clean Air Interstate Rule Provisions**

**Brooksville Power Plant**

**STEP 3**

**CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM**

**Read the  
standard  
requirements.**

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall:
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  - (ii) [Reserved].
- (2) The owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart GG, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO<sub>x</sub> source with the following CAIR NO<sub>x</sub> Emissions Requirements.

NO<sub>x</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 40 CFR 96.154(e) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (1) of the NO<sub>x</sub> Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>x</sub> Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO<sub>x</sub> unit.

Excess Emissions Requirements.

- If a CAIR NO<sub>x</sub> source emits NO<sub>x</sub> during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:
- (1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
  - (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
  - (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
  - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program.
  - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

**SECTION IV. CAIR PART.**  
**Clean Air Interstate Rule Provisions**

**Brooksville Power Plant**

**STEP 3,**  
**Continued**

Liability.

- (1) Each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units at the source.
- (3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**CAIR SO<sub>2</sub> TRADING PROGRAM**

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall:
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  - (ii) [Reserved].
- (2) The owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO<sub>2</sub> source and each SO<sub>2</sub> CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO<sub>2</sub> source with the following CAIR SO<sub>2</sub> Emission Requirements.

SO<sub>2</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO<sub>2</sub> Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Trading System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO<sub>2</sub> unit.

Excess Emissions Requirements.

If a CAIR SO<sub>2</sub> source emits SO<sub>2</sub> during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

**SECTION IV. CAIR PART.**  
**Clean Air Interstate Rule Provisions**

**Brooksville Power Plant**

**Recordkeeping and Reporting Requirements.**

(1) Unless otherwise provided, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart H-HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart H-HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO<sub>2</sub> Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR SO<sub>2</sub> Trading Program.

(2) The CAIR designated representative of a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR SO<sub>2</sub> Trading Program, including those under 40 CFR Part 96, Subpart H-HH.

**Liability.**

(1) Each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program.

(2) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and of the CAIR SO<sub>2</sub> units at the source.

(3) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.

**Effect on Other Authorities.**

No provision of the CAIR SO<sub>2</sub> Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**CAIR NO<sub>x</sub> OZONE SEASON TRADING PROGRAM**

**CAIR Part Requirements.**

(1) The CAIR designated representative of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall:

(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and

(i) [Reserved].

(2) The owners and operators of each CAIR NO<sub>x</sub> Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO<sub>x</sub> Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart OCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

**Monitoring, Reporting, and Recordkeeping Requirements.**

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart H-HH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart H-HH, shall be used to determine compliance by each CAIR NO<sub>x</sub> Ozone Season source with the following CAIR NO<sub>x</sub> Ozone Season Emissions Requirements.

**NO<sub>x</sub> Ozone Season Emission Requirements.**

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart H-HH.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO<sub>x</sub> Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>x</sub> Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.

(5) A CAIR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO<sub>x</sub> Ozone Season unit.

**STEP 3,  
Continued**

**SECTION IV. CAIR PART.**  
**Clean Air Interstate Rule Provisions**

**Brooksville Power Plant**

Excess Emissions Requirements.

If a CAIR NO<sub>x</sub> Ozone Season source emits NO<sub>x</sub> during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.

(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart H-H-H, of this part, provided that to the extent that 40 CFR Part 96, Subpart H-H-H, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Ozone Season Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart H-H-H.

Liability.

(1) Each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit shall meet the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.

(2) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season source or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Ozone Season units at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season unit or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Ozone Season source or CAIR NO<sub>x</sub> Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

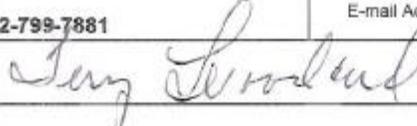
**STEP 3,  
Continued**

**STEP 4**

**Certification (for designated representative or alternate designated representative only)**

**Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.**

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name <b>Terry Woodard</b>	Title <b>Plant Manager</b>
Company Owner Name <b>Florida Power Development LLC</b>	
Phone <b>352-799-7881</b>	E-mail Address <b>wwoodard@deltapowerservices.com</b>
Signature 	Date <b>6-25-14</b>

**SECTION V. APPENDICES.**

**The Following Appendices are Enforceable Parts of this Permit**

- Appendix A, Glossary.  
Appendix ASME, American Society of Mechanical Engineers Test Form.  
Appendix BMP, Best Management Practices Plan.  
Appendix CAM, Compliance Assurance Monitoring Plan.  
Appendix CEMS, Continuous Emission Monitoring System.  
Appendix F of 40 CFR 75, Conversion Procedures.  
Appendix I, List of Insignificant Emissions Units and/or Activities.  
Appendix NESHAP, Subpart A - General Provisions.  
Appendix NESHAP, Subpart DDDDD - NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters and Commercial and Industrial Solid Waste Incineration.  
Appendix NSPS, Subpart A - General Provisions.  
Appendix NSPS, Subpart Db - Standards of Performance Small Industrial-Commercial-Institutional Steam Generating Units.  
Appendix RR, Facility-wide Reporting Requirements.  
Appendix TR, Facility-wide Testing Requirements.  
Appendix TV, Title V General Conditions.  
Appendix U, List of Unregulated Emissions Units and/or Activities.