

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

New Hope Power Partnership  
Okeelanta Cogeneration Plant  
8001 U.S. Highway 27 South (P.O. Box 9)  
South Bay, FL 33493

*Authorized Representative:*

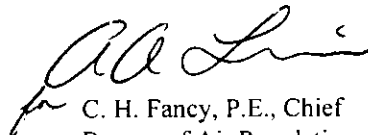
Mr. Rodney Williams, Plant Manager

Air Permit No. PSD-FL-196M  
Project No. 0990332-014-AC  
Okeelanta Cogeneration Plant  
SIC No. 4911  
Palm Beach County

Enclosed is final air permit No. PSD-FL-196M for the cogeneration plant located off U.S. Highway 27 and approximately six miles south of South Bay in Palm Beach County, Florida. This modification: revises emissions limiting and monitoring provisions for emissions of carbon monoxide, fluorides, lead, mercury, sulfur dioxide, and sulfuric acid mist; removes the authority to fire low sulfur coal as a backup fuel; and removes the requirement to conduct stack testing for chromium, copper and arsenic. In addition, this modification updates the permit format and incorporates all previous permit modifications into a single document. As noted in the Final Determination (attached), only minor changes were made to correct typographical errors. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

  
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

CERTIFICATE OF SERVICE

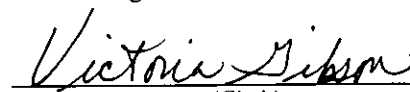
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 2/1/02 to the persons listed below.

Mr. Rodney Williams, Plant Manager\*  
Mr. James Meriwether, Okeelanta  
Mr. Matthew Capone, Okeelanta  
Mr. David Buff, Golder Associates

Mr. James Stormer, PBCHD  
Mr. Ron Blackburn, SD  
Mr. Gregg Worley, EPA Region 4  
Mr. John Bunyak, NPS

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 February 1, 2002  
(Clerk) (Date)

## FINAL DETERMINATION

### PERMITTEE

New Hope Power Partnership  
Okeelanta Cogeneration Plant  
8001 U.S. Highway 27 South (P.O. Box 9)  
South Bay, FL 33493

### PERMITTING AUTHORITY

Florida Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida, 32399-2400

### PROJECT

Project No. 0990332-014-AC  
Air Permit No. PSD-FL-196M

The original PSD permit authorized the construction of a biomass and fossil fuel-fired 74.9 MW cogeneration plant adjacent to Okeelanta Corporation's sugar mill. The original PSD permit expired on July 1, 1996. The permittee obtained several previous permit modifications that extended some construction-related activities as well as revising specific conditions of the permit. This modification revises: emissions limiting and monitoring provisions for emissions of carbon monoxide, fluorides, lead, mercury, sulfur dioxide, and sulfuric acid mist; removes the authority to fire low sulfur coal as a backup fuel; and removes the requirement to conduct stack testing for chromium, copper and arsenic. In addition, this modification updates the permit format and incorporates all previous permit modifications into a single document. Prior to "New Hope Power Partnership", the cogeneration plant was owned and operated by the "Okeelanta Power Limited Partnership".

The cogeneration plant is located off U.S. Highway 27 and approximately six miles south of South Bay in Palm Beach County, Florida. The UTM coordinates are Zone 17, 524.90 km East, and 2940.10 km North. The map coordinates are latitude 26° 35' 00" N and longitude 80° 45' 00" W.

### NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on December 20, 2001. The applicant published the "Public Notice of Intent to Issue" in The Palm Beach Post on December 29, 2001. The Department received proof of publication on January 7, 2002. No requests for administrative hearings were filed.

### COMMENTS/CHANGES

No comments on the Draft Permit were received from the public, the Department's South District Office, the EPA Region 4 office, the National Park Service or the Palm Beach County Health Department. Minor comments were received from the applicant. The following provides the Department's response to each comment.

#### Technical Evaluation and Preliminary Determination

**Page 6, Table 4A:** The applicant noted errors in the table for SO<sub>2</sub> and SAM emissions. **Response:** Future actual emissions were corrected to 345.0 TPY for SO<sub>2</sub> and 20.7 TPY for SAM. The net emissions for each pollutant were corrected accordingly. The PSD significant emission rate for SAM was also corrected to 7 TPY. These changes do not affect any conclusions regarding PSD applicability.

## FINAL DETERMINATION

**Page 10, 7. Sulfur Dioxide (SO<sub>2</sub>) Emissions, 2<sup>nd</sup> Paragraph:** The applicant comments that the text should be changed as follows, "... potential SO<sub>2</sub> emissions are being reduced from 1154 to ~~402.5~~ 345.0 tons per year". **Response:** This section of the report discusses the *applicant's request* for a long-term SO<sub>2</sub> emissions limit of 0.07 lb/MMBtu, which would result in an annual emission rate of 402.5 TPY. The draft permit established a limit of 0.06 lb/MMBtu, which results in an annual emission rate of 345.0 TPY. No change was necessary.

**Page 14, 11. Lead Emissions:** The applicant notes that the Department did not address the request for an emission limit "bubbled" over the three boilers. **Response:** The following statement was added to the end of this section, "Based on the available information, the Department believes each boiler is capable of complying with the specified emission standard on an individual basis."

**Page 15, 12. Mercury Emissions:** The applicant notes that the Department did not address the request for an emission limit "bubbled" over the three boilers. **Response:** The following statement was added to the end of this section, "Based on the available information, the Department believes each boiler is capable of complying with the specified emission standard on an individual basis."

### Draft Permit

**Page 5, Construction Details, Condition 5:** The applicant notes that installation of the authorized natural gas burner system is complete on two of the three boilers. Each system consists of four burners with a total maximum heat input of 400 MMBtu per hour when firing natural gas alone. The third boiler will have the same configuration. **Response:** The Department updated the permit to reflect the installed equipment. The emissions unit description and Condition Nos. 5 and 10 were revised to reflect the maximum heat input of the final equipment selected.

**Page 7, Condition 11a:** The applicant comments that Methods 3050/6010 are EPA Method SW-846 methods and not ASTM Methods. **Response:** The condition was revised accordingly.

**Page 11, Condition 19d:** The applicant requests revising the last sentence to require the reporting of annual emissions for all such events per year. **Response:** To clarify that the requirement is to report annual emissions for each *type* of incident, the condition was revised to:

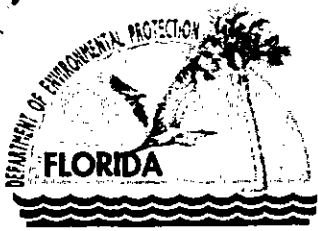
*"Reporting:* In conjunction with the annual operating report, the permittee shall identify the number of startups, the number of shutdowns, and the number of malfunctions that occurred during the year for each boiler. For each boiler's CO and NO<sub>x</sub> monitors, the report shall identify the annual hours of emission data excluded from the compliance determination due to each type of incident (startups; shutdowns; and documented malfunctions)."

**Appendix D, Page D-1, Final BACT Determination (SO<sub>2</sub>):** The applicant requests correction of 24-hour SO<sub>2</sub> average from "block" to "rolling", consistent with the permit. **Response:** The error was corrected.

**Appendix E, Page E-1, Continuous Monitor Requirements, 1b:** The applicant states that the biomass feed rates are determined directly by weigh scales (not the fuel heating values) and requests revision similar to the Title V permit text. **Response:** The condition was revised to be consistent with the similar condition (I.12.b.) in the Title V permit.

### CONCLUSION

Other changes were made to correct typographical errors. The final action of the Department is to issue the permit with the minor changes described above.



# Department of Environmental Protection

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

## PERMITTEE

New Hope Power Partnership  
Okeelanta Cogeneration Plant  
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## PROJECT AND LOCATION

The original PSD permit authorized the construction of a biomass and fossil fuel-fired 74.9 MW cogeneration plant adjacent to Okeelanta Corporation's sugar mill. The original PSD permit expired on July 1, 1996. The permittee obtained several previous permit modifications that extended some construction-related activities as well as revising specific conditions of the permit. This modification revises: emissions limiting and monitoring provisions for emissions of carbon monoxide, fluorides, lead, mercury, sulfur dioxide, and sulfuric acid mist; removes the authority to fire low sulfur coal as a backup fuel; and removes the requirement to conduct stack testing for chromium, copper and arsenic. In addition, this modification updates the permit format and incorporates all previous permit modifications into a single document.

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## STATEMENT OF BASIS

This PSD air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Part 52, Section 21 of the Code of Federal Regulations. Specifically, this permit is issued pursuant to the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality, Rule 62-212.400, F.A.C. The permittee is authorized to operate the installed equipment in accordance with the conditions of this permit, the conditions of the Title V operation permit, and as described in the application, approved drawings, plans, and other documents on file with the Department.

## CONTENTS

- Section I. General Information
- Section II. Administrative Requirements
- Section III. Emissions Units Specific Conditions
- Section IV. Appendices

Howard L. Rhodes, Director  
Division of Air Resources Management

Effective Date

"More Protection, Less Process"

## SECTION I. GENERAL INFORMATION

### FACILITY DESCRIPTION

The facility consists of two adjacent plants. Okeelanta Corporation operates a sugar mill (SIC No. 2061) and sugar refinery (SIC No. 2062) including packaging and transshipment activities. New Hope Power Partnership operates a 74.9 net MW cogeneration plant that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid (SIC 4911). This permit addresses the cogeneration plant, which consists of the following emissions units.

ID	Emission Unit Description
001	Cogeneration Boiler A (715 MMBtu per hour)
002	Cogeneration Boiler B (715 MMBtu per hour)
003	Cogeneration Boiler C (715 MMBtu per hour)
004	Material handling and storage

### REGULATORY CLASSIFICATION

Title III: Based on the Title V operation permit, the facility may have emissions of hazardous air pollutants (HAPs) at levels greater than the major source thresholds.

Title IV: Based on the Title V operation permit, the facility does not operate any units subject to the acid rain provisions of the Clean Air Act.

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOC).

PSD: The facility is located in an area currently designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The cogeneration plant is considered a "fossil fuel fired steam electric plant of more than 250 million BTU per hour of heat input", which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a major source of air pollution with respect to Rule 62-212.400, F.A.C., the Prevention of Significant Deterioration (PSD) of Air Quality.

PPSC: The facility is not subject to Chapter 62-17, F.A.C. for Power Plant Site Certification because it produces less than 75 MW of steam-generated electrical power.

NSPS: The facility operates emissions units subject to the New Source Performance Standards of 40 CFR 60, including Subparts Da and Db (boilers) and Subpart Kb (fuel storage tanks).

### PERMITTING AUTHORITY

All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

### COMPLIANCE AUTHORITY

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29, West Palm Beach, Florida 33402-0029. Copies of all such documents shall be submitted to the Air Resources Section at the South District Office of the Florida Department of Environmental Protection (DEP) at 2295 Victoria Avenue, Suite 364 in Fort Myers, Florida 33902-2549.

## SECTION I. GENERAL INFORMATION

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### APPENDICES

The following Appendices are attached in Section IV as part of this permit.

Appendix A. Citation Format

Appendix B. General Conditions

Appendix C. Standard Requirements

Appendix D. Final BACT Determinations

Appendix E. Continuous Monitor Requirements

### RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action and are on file with the Department.

- Initial air construction Permit No. PSD-FL-196 issued September 27, 1993 and all subsequent modifications.
- Permit application received on January 2, 2001 and all related correspondence to make complete.
- Initial draft permit package issued on (Draft).

### CITATION FORMAT

Appendix A of this permit describes the format used to cite applicable rules and regulations as well as previous permitting actions.

## SECTION II. ADMINISTRATIVE REQUIREMENTS

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1. General Conditions: The permittee is subject to, and shall operate under, the attached General Conditions listed in Appendix B of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
2. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 51, 52, and 60 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
3. Permit Expiration: The original expiration date for the construction of this plant was July 1, 1996. However, construction of the cogeneration plant is complete and commercial operation has commenced. This revised permit does not authorize any additional construction.
4. Effective Date: The effective date of the modified PSD permit is specified on the placard page (page 1).
5. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
8. Title V Permit Revision: Within 180 days of the effective date of this modified PSD permit, the permittee shall submit an application for a revised Title V permit to incorporate the changes and operate the cogeneration plant. To apply for a revised Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall include a Compliance Assurance Monitoring Plan. The application shall be submitted to the Department's Bureau of Air Regulation with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

## SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

This section of the permit addresses the following emissions units.

### **Emissions Units 001, 002, and 003: Cogeneration Boilers A, B, and C**

*Description:* Each unit is a biomass-fired spreader stoker steam boiler manufactured by Zurn and designed to produce approximately 455,400 pounds per hour of steam at 1500 psig and 975° F.

*Fuels and Capacity:* The primary fuel is biomass (715 MM Btu per hour), which includes bagasse from the adjacent sugar mill and clean wood material delivered to the plant by area subcontractors. Auxiliary fuels include natural gas (400 MMBtu per hour) and very low sulfur distillate oil (490 MMBtu per hour).

*Controls:* Pollution control equipment includes low-NO<sub>x</sub> burners for gas firing, a selective non-catalytic reduction system to reduce nitrogen oxides emissions, mechanical dust collectors and an electrostatic precipitator to reduce particulate matter emissions, and an activated carbon injection system to reduce potential mercury emissions. Good operating practices and the efficient combustion of clean, low-sulfur fuels minimizes emissions of carbon monoxide, sulfuric acid mist, sulfur dioxide, and volatile organic compounds.

*Stack Parameters:* Exhaust gases exit a 10 foot diameter stack that is at least 199 feet tall and with a volumetric flow rate of approximately 246,000 acfm at 295° F.

**Emissions Unit 004: Material handling and storage** including unloading operations, stockpiles, transfer operations, conveyors, screens, crushers, hoppers, silos, and storage tanks.

### CONSTRUCTION DETAILS

1. **Generating Capacity:** Construction of the proposed cogeneration plant shall reasonably conform to the plans described in the application. The plant shall be designed, constructed, and operated such that the generating capacity does not exceed 74.9 net megawatt (MW) based on a 1-hour average. The owner or operator shall not modify the cogeneration plant in any way that would cause the plant to exceed the limit on maximum net generating capacity. The hourly average net generation rate shall be recorded and retained for at least 5 years.
2. **Boiler Design:** The cogeneration boilers shall consist of spreader stoker units designed to fire biomass as the primary fuel with pipeline-quality natural gas and distillate oil as auxiliary fuels. Natural gas and distillate oil are fired at startup, to supplement biomass fuel, and for periods when the biomass fuel supply is interrupted. No other fuels are authorized. {Permitting Note: Each boiler was originally designed to fire low sulfur coal as an emergency backup fuel, but no transfer, crushing, or storage systems were ever installed. The permittee shall apply for a permit modification before firing any other fuel.}
3. **Stack:** Each boiler shall have an individual stack that is at least 199 feet tall. The permanent stack sampling facilities for each stack must comply with Rule 62-297.345, F.A.C.
4. **Process Monitors:** Each boiler shall be equipped with instruments to measure the fuel feed rate, heat input, steam production, steam pressure, and steam temperature. Appendix E identifies minimum requirements for monitoring equipment.
5. **Control Equipment:** Each boiler shall be equipped with:
  - Low-NO<sub>x</sub> natural gas burners rated for no more than 0.15 pounds of NO<sub>x</sub> per MMBtu of heat input. Four burners are installed with one in each corner the boiler. The maximum heat input rate from all four burners is 400 MMBtu per hour.
  - Mechanical dust collectors consisting of four, large diameter, multi-tube modules with airfoil vanes or equivalent equipment. The mechanical dust collectors shall be installed and maintained as pre-control devices prior to each electrostatic precipitator and designed for a removal efficiency of at least 85% of the particulate matter greater than 10 microns in size (assuming a specific gravity of 2.00).
  - An electrostatic precipitator (ESP) designed for at least 98 percent removal of particulate matter.



### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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- A selective non-catalytic reduction (SNCR) system designed for at least 40 percent removal of NOx.
  - A carbon injection system (or equivalent) for potential control of mercury emissions.
6. Continuous Monitors: For each cogeneration boiler, the permittee shall install, calibrate, maintain, and operate continuous emissions monitors (CEMS) and continuous opacity monitors (COMS) to measure and record emissions of carbon monoxide (CO), nitrogen oxides (NOx), opacity, oxygen (O<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) in a manner sufficient to demonstrate compliance with the standards of this permit. The opacity monitor shall be placed in the ductwork between the electrostatic precipitator and the stack or in the stack. Appendix E identifies minimum requirements for monitoring systems.
7. Good Combustion Practices: An oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously optimize air/fuel ratio parameters. Depending on the fuel quality and existing combustion conditions, the operator shall provide sufficient excess air to ensure good combustion within the boiler. The application to revise the Title V operation permit shall identify “good combustion practices” for the cogeneration boilers to minimize pollutant emissions during startup, operation, and shutdown. The document “Use of Flue Gas Oxygen Meter as BACT for Combustion Controls” shall be used as a guide. Good combustion controls shall also include the following:
- Maintain improved combustion controls to provide efficient tuning of air/fuel control instrumentation.
  - Maintain rotary pocket-style wood feeders with efficient air seal to minimize intrusion of ambient air.
  - Maintain effective water level controls in bottom ash system to prevent intrusion of ambient air.
  - Mix biomass fuel to provide a consistent fuel blend.
  - Maintain the flue gas oxygen content to provide efficient combustion for the existing conditions.
  - When necessary to enhance poor combustion, reduce the biomass feed rate below the maximum rate.
  - When necessary to enhance poor combustion, co-fire natural gas or distillate oil.
8. O&M Plans: The application to revise the Title V operation permit shall include an operation and maintenance plan consisting of at least the following items.
- a. For the cogeneration boilers, electrostatic precipitators (ESP), selective non-catalytic reduction (SNCR) systems, activated carbon injection (ACI) mercury control systems, and silo fabric filters, identify: the capacities, design efficiencies, pollutant emission rates, general operational description of equipment, key design and operating parameters, expected operating range of each key parameter, monitoring of key parameters, frequency of monitoring (instantaneous, continual, or continuous), and actions taken to return key parameters to within the expected operating ranges. The plan shall also specify good operating practices to promote efficient boiler combustion, startup and shutdown procedures for the boilers and control systems to minimize emissions, and precautions to prevent fugitive particulate matter emissions. {Permitting Note: Operation outside of the specified operating range for any monitored parameter would not be a violation by itself. However, continued operation outside of a specified operating range without corrective action may be considered circumvention of the air pollution control equipment or methods.}
  - b. For the selective non-catalytic reduction (SNCR) systems identify an alternate NOx emissions control plan based on previous monitoring data that shall be implemented in case the NOx monitoring system is down. The plan shall identify the minimum urea injection rate that has demonstrated continuous compliance with the NOx emissions standard at various load conditions.
9. Materials Handling Controls: For the fly ash handling and mercury control system reactant storage systems:
- a. The particulate matter filter control system for the storage silos shall be designed to achieve an outlet dust loading of no greater than 0.01 grains per actual cubic feet of exhaust.
  - b. The fly ash handling system (including transfer points and storage bin) shall be enclosed. The ash shall

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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be wetted in the ash conditioner to minimize fugitive dust prior to discharging to the disposal bin.

#### OPERATIONAL RESTRICTIONS

10. Permitted Capacity: The cogeneration boilers shall be constructed and operated in accordance with the capabilities and specifications described in the application. The maximum heat input rate to each cogeneration boiler shall not exceed 715 MMBtu/hr when burning 100 percent biomass, 400 MMBtu/hr when burning 100 percent natural gas, and 490 MMBtu/hr when burning 100 percent very low sulfur distillate oil. The maximum heat input to the entire plant (total for all three boilers combined) shall not exceed  $11.5 \times 10^6$  MMBtu during any consecutive 12-month period. The steam production of each boiler shall not exceed an average of 455,418 pounds per hour at 1,500 psig and 975°F.
11. Primary Fuel: The primary fuel for the plant shall be biomass, which shall consist of bagasse and authorized wood material. Bagasse is the fibrous vegetative residue remaining after the sugarcane milling process. Authorized wood material is clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter. Each cogeneration boiler shall combust no more than 30% by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste (MSW) in 40 CFR 60.51a. The biomass fuel used at the cogeneration plant shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The fuel used at the cogeneration plant shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The permittee shall perform a daily visual inspection of any wood material or similar vegetative matter that has been delivered to the plant for use as fuel. Any shipment observed to contain prohibited materials shall not be used as fuel, unless such materials can be readily segregated and removed from the wood material and vegetative matter.

The permittee shall design and implement a management and testing program for the wood material and other materials delivered to the plant for fuel. The program shall be designed to keep painted and chemically treated wood, household garbage, toxic or hazardous non-biomass and non-combustible waste material, from being burned at this plant. The program shall provide for the routine inspection and/or testing of the fuel at the originating wood yard sites as well as at the cogeneration site, to ensure that the quantities of painted or chemically treated wood in the fuel are minimized. Based on the analysis of a composite sample, wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper shall not be burned. Fuel scheduled for burning shall be inspected daily. At a minimum, the fuel management program shall include the following sampling and analyses:

- a. At least twice each month, the permittee shall have separate analyses conducted on an as-fired wood sample and an as-fired bagasse sample for the following: heating value (modified ASTM D3286, Btu/lb, dry), carbon content (modified ASTM D5373, percent by weight, dry), sulfur content (modified ASTM D4239 Method C, percent by weight, dry), and moisture content (modified ASTM D3173, percent by weight). In addition the wood sample shall be analyzed for copper, chromium, and arsenic in accordance with Methods 3050/6010 (EPA Method SW-846) and reported in ppm by weight, dry. Samples shall be taken at least two weeks apart.
- b. At least once each month, the permittee shall have an analysis conducted on a composite sample of fly ash and bottom ash for arsenic, copper, and chromium in accordance with the procedures described in EPA Method SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (40 CFR 261, Appendix III). The analytical results from ash testing shall be used in conjunction with those from the as-fired wood samples to evaluate the effectiveness of the fuel management program in removing chemically treated wood from the biomass fuel. The permittee shall dispose of all ash generated on site in accordance with the applicable state and federal regulations.
- c. Analytical results of the as-fired biomass fuels and ash sampling shall be summarized and provided in the quarterly report to the Compliance Authority.

The ash and fuel management program shall become part of the Title V operation permit.

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

12. **Auxiliary Fuel:** The cogeneration boilers shall fire only very low sulfur distillate oil and pipeline-quality natural gas as auxiliary fuels. Distillate oil shall be new No. 2 oil with a maximum sulfur content of 0.05 percent sulfur by weight as determined by the appropriate test method listed in 40 CFR 60.17. "New" oil is oil that has been refined from crude oil and that has not been used in any manner that may contaminate it. Each boiler may startup solely on pipeline-quality natural gas or very low sulfur distillate oil.
13. **Fossil Fuel Limitation:** The firing of fossil fuels (distillate oil and natural gas) shall be less than 25 percent of the total heat input to each cogeneration boiler during any calendar quarter.
14. **Fuel Records:** The permittee shall maintain a daily log of the amounts and types of fuels used. The amount, heating value, and sulfur content of each fuel oil delivery shall be kept in a log for at least five years. For each calendar month, the actual monthly SO<sub>2</sub> emissions and the 12-month rolling total SO<sub>2</sub> emissions shall be determined and kept in a log.
15. **Emergency Standby:** The existing sugar mill boilers shall comply with the following requirements.
  - a. Sugar mill boiler Nos. 4, 5, 6, 10, 11, 12, 14, and 15 may be retained for emergency standby operation until April 1, 2002. These boilers shall only operate in the event of electrical or mechanical failure of all three of the cogeneration boilers. Simultaneous operation of any of these sugar mill boilers with any of the cogeneration boilers is prohibited. Sugar mill boiler Nos. 4, 5, 6, 10, 11, 12, 14, and 15 shall be permanently shutdown and rendered incapable of operation no later than October 1, 2002.
  - b. Each sugar mill boiler shall comply with its most recent air construction and operation permit, including all emissions performance, testing, and monitoring requirements as well as any applicable Alternate Sampling Procedures approved by the Department. The sugar mill boilers shall only fire fuels approved in the most recent permits.
16. **Auxiliary Boiler:** Sugar mill boiler No. 16 shall be operated in accordance with revised Permit No. PSD-FL-169A and the subsequently revised Title V operation permit.

#### EMISSIONS LIMITING STANDARDS

17. **Emissions Standards:** Based on the maximum permitted heat input to each cogeneration boiler, stack emissions shall not exceed the standards specified in the following table:

Pollutant	Averaging Period	Emissions Standards Per Boiler <sup>1</sup>	
		lb/MMBtu	lb/hr
Carbon Monoxide (CO) <sup>a</sup>	30-day rolling CEMS avg.	0.50	357.5
	12-month rolling CEMS avg.	0.35	
Nitrogen Oxides (NO <sub>x</sub> ) <sup>b</sup>	30-day rolling CEMS avg.	0.15	107.3
Sulfur Dioxide (SO <sub>2</sub> ) <sup>c</sup>	24-hour rolling CEMS avg.	0.20	143.0
	30-day rolling CEMS avg.	0.10	
	12-month rolling CEMS avg.	0.06	
Stack Opacity <sup>d</sup>	6-minute block COMS avg. (Alternative: EPA Method 9)	≤ 20% opacity, except for one 6-minute block per hour that is ≤ 27% opacity	
Particulate Matter (PM/PM <sub>10</sub> ) <sup>e</sup>	3-run test avg.	0.03	21.5
Volatile Organic Compounds (VOC) <sup>f</sup>	3-run test avg.	0.06	42.9
Lead <sup>g</sup>	3-run test avg.	1.5 x 10 <sup>-04</sup>	NA
Mercury <sup>h</sup>	3-run test avg.	5.4 x 10 <sup>-06</sup>	NA
Fluorides <sup>i</sup>	Fluoride emissions shall be minimized by firing biomass as the primary fuel with natural gas and very low sulfur distillate oil as auxiliary fuels.		

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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- a. Compliance shall be determined by data collected from the required CO CEMS in terms of “lb/MMBtu of heat input”. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and be consistent with the NO<sub>x</sub> monitoring requirements below. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period.
- b. Compliance shall be determined by data collected from the required NO<sub>x</sub> CEMS in terms of “lb/MMBtu of heat input”. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and the requirements of 40 CFR 60.13, 60.44a, 60.46a, 60.47a, 60.48a, and 60.49a. A boiler-operating day is any day in which any authorized fuel is fired.
- c. Compliance with the SO<sub>2</sub> standards shall be determined by data collected from the required SO<sub>2</sub> CEMS in terms of “lb/MMBtu of heat input”. The 24-hour average shall be determined by calculating the arithmetic average of all valid hourly emission rates for 24 successive boiler-operating hours. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler-operating days and the requirements of 40 CFR 60.13, 60.43a, 60.46a, 60.47a, 60.48a, and 60.49a. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period. Valid SO<sub>2</sub> hourly averages shall not be excluded from any compliance average. {Permitting Note: Potential emissions of sulfuric acid mist are minimized by the effective control of SO<sub>2</sub> emissions with the firing of low sulfur fuels. For reporting purposes, sulfuric acid mist emissions shall be estimated as 6% of the total measured SO<sub>2</sub> emissions.}
- d. Continuous compliance with the opacity standard shall be determined by data collected from the required COMS in terms of “percent opacity” based on 6-minute block averages. Alternatively, compliance may also be determined by conducting EPA Method 9 observations.
- e. Compliance with the particulate matter standards shall be determined by the average of three test runs conducted in accordance with EPA Method 5. For purposes of reporting PM<sub>10</sub> emissions, it shall be assumed that all particulate matter emitted is PM<sub>10</sub>.
- f. Compliance with the VOC standards shall be determined by the average of three test runs conducted in accordance with EPA Method 25A based on propane. In addition, the permittee may choose to conduct EPA Method 18 concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. Otherwise, all emissions measured by EPA Method 25A shall be considered “volatile organic compounds”.
- g. Compliance with the lead standards shall be determined by the average of three test runs conducted in accordance with EPA Method 12 or 29.
- h. Compliance with the mercury standards shall be determined by the average of three test runs conducted in accordance with EPA Method 101A or 29. Emissions in excess of this standard shall be a violation of the permit. In addition, if two or more cogeneration boilers exceed the annual mercury emission limit, the permittee shall reactivate the carbon injection system for all three units within 30 days of the stack test report due date. The minimum carbon injection rate shall be at least 7 pounds per hour. Within 60 days of the stack test report due date, the permittee shall submit to the permitting and compliance authorities a mercury testing protocol designed to establish an effective carbon injection rate to control mercury emissions. Within 60 days of receiving approval for the mercury testing protocol by the permitting authority, the permittee shall begin the approved testing program. At a minimum, the permittee shall submit a full engineering report summarizing the uncontrolled emissions, controlled emissions, fuels, operating capacities, and recommending a minimum activated carbon injection rate to control mercury emissions.
- i. This fuel specification is the BACT standard for fluoride emissions. {Permitting Note: For reporting purposes only, the fluoride emissions factor for firing biomass is  $1.9 \times 10^{-04}$  lb/MMBtu.

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

- j. Each boiler shall comply with the standards when firing any combination of authorized fuels. Required compliance tests shall be performed in accordance with the requirements of Condition No. 20. The cogeneration boilers are also subject to the new source performance standards (NSPS Subpart Da) for new electric utility steam generating units. These requirements include the general provisions of Subpart A in 40 CFR 60, as well as the following source-specific applicable requirements: 60.40a (Applicability and Designation of Affected Facility); 60.41a (Definitions); 60.42a (Standards for Particulate Matter); 60.43a (Standard for Sulfur Dioxide); 60.44a (Standard for Nitrogen Oxides); 60.46a (Compliance Provisions); 60.47a (Emissions Monitoring); 60.48a (Compliance Determination Procedures and Methods); and 60.49a (Reporting Requirements). The cogeneration boilers are also subject to Rule 62-296.405(2), F.A.C. (Fossil Fuel Steam Generators with more than 250 MMBtu per Hour of Heat Input), Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment), and Rule 62-296.570, F.A.C. (Reasonably Available Control Technology Requirements for Major VOC and NOx Facilities).

{Permitting Note: Appendix D identifies the final BACT determinations for the cogeneration boilers.}

18. Material Handling: The following conditions apply to the biomass, ash, and activated carbon handling facilities.
- All conveyors and conveyor transfer points shall be enclosed to preclude PM emissions (except those directly associated with the stacker/reclaimer, for which enclosure is operationally infeasible).
  - Water sprays, chemical wetting agents, and/or stabilizers shall be applied to storage piles, handling equipment, unenclosed transfer points, etc. during dry periods and as necessary to prevent visible emissions. When adding, moving or removing material from the storage pile, visible emissions of no more than 20% opacity are allowed.
  - The mercury control system reactant storage silos shall be maintained at a negative pressure while operating with the exhaust vented to a filter control system. Visible emissions from any storage silo shall not exceed 5 percent opacity based on a 6-minute block average. A visible emissions test (EPA Method 9) shall be performed at least annually for each silo that is loaded with carbon during the federal fiscal year.

#### STARTUP, SHUTDOWN, AND MALFUNCTION

19. Startup, Shutdown, and Malfunction Requirements: The permittee shall comply with the following requirements regarding periods of startup, shutdown, and malfunction for each cogeneration boiler.
- Definitions*
    - Excess emissions are emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions that occur during startup, shutdown, or malfunction. [Rule 62-210.200(106), F.A.C.]
    - Startup is the commencement of operation of a boiler which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which may result in excess emissions. Periods of startup for each boiler shall end once steam generation reaches 150,000 pounds per hour. A cold startup is a startup after the boiler has been shutdown for 24 hours or more. A warm startup is a startup after the boiler has been shutdown for less than 24 hours.
    - Shutdown is the cessation of the operation of a boiler for any purpose after steam generation drops below 150,000 pounds per hour.
    - Malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

manner. [Rule 62-210.200(160), F.A.C.]

- b. *Prohibition:* Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. Emissions data recorded during such preventable periods shall be included in the compliance averages. [Rule 62-210.700(4), F.A.C.]
- c. *Monitoring Data Exclusion:* Each continuous monitoring system shall operate and record data during all periods of operation (including startup, shutdown, and malfunction) except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Provided the operators implement best operational practices to minimize the amount and duration of emissions, the following conditions apply. Pursuant to Rules 62-210.700(1) and (5), F.A.C., these conditions consider the variations in operation of the cogeneration boilers.
- 1) Natural gas or distillate oil shall be fired during startup prior to energizing the electrostatic precipitator (ESP). Once the operating temperature recommended by the ESP manufacturer is maintained (approximately 340° F to 350 ° F), it shall be placed on line and the boiler shall comply with the opacity standard specified in Condition No. 17. The ESP shall be on line and functioning properly before firing any biomass. The opacity limit does not apply when the ESP is off line due to warm startup, cold startup, or shutdown. No more than twenty 6-minute block averages of opacity monitoring data shall be excluded in a 24-hour period due to documented malfunctions.
  - 2) Hourly CO and NOx emission rate values collected during startup, shutdown, or documented malfunction may be excluded from the 30-day and/or 12-month compliance averages. No more than six hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a cold startup. No more than three hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a warm startup. No more than two hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a malfunction. No more than two hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a shutdown. For each cogeneration boiler, no more than 183 hourly emission rate values shall be excluded during any calendar quarter.
  - 3) All valid hourly SO<sub>2</sub> emission rate values shall be included in all of the compliance averages. [40 CFR 60.46a and 60.49a]
  - 4) To “document” a malfunction, the operator shall notify the Compliance Authority within one working day of the malfunction by phone, facsimile, or electronic mail. The notification shall include the date and time of malfunction, a description of the malfunction and probable cause, steps to taken to minimize emissions, and actions taken to correct the problem. [Rules 62-210.700(6) and 62-4.130, F.A.C.]
- d. *Reporting:* In conjunction with the annual operating report, the permittee shall identify the number of startups, the number of shutdowns, and the number of malfunctions that occurred during the year for each boiler. For each boiler’s CO and NOx monitors, the report shall identify the annual hours of emission data excluded from the compliance determination due to each type of incident (startups; shutdowns; and documented malfunctions).

[Rule 62-210.700, F.A.C.; Rule 62-4.070(3), F.A.C.; 40 CFR 60.8; and 40 CFR 60.46a]

### COMPLIANCE METHODS AND REPORTING

#### 20. Stack Test Requirements

- a. *Initial Tests:* Within 90 days of the effective date of this permit, the permittee shall conduct compliance tests for emissions of lead, mercury, particulate matter, and volatile organic compounds. If conducted within the 12-month period prior to the effective date of this permit, previous emissions tests may be used to demonstrate compliance for these pollutants. The Department may require initial tests to be

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

repeated if major physical or operational changes are made that affect main components such as the boiler, fuels, and/or pollution control equipment.

- b. *Annual Tests:* At least once during each federal fiscal year, the permittee shall conduct compliance tests for emissions of mercury, particulate matter, and volatile organic compounds.
- c. *Renewal Tests:* Within the 12-month period prior to submitting an application to renew the Title V air operation permit, the permittee shall conduct compliance tests for emissions of lead, mercury, particulate matter, and volatile organic compounds. Tests shall be conducted at five-year intervals.
- d. *Test Procedures:* The emission compliance tests shall be conducted in accordance with the provisions of Chapter 62-297, F.A.C., 40 CFR 60.46a (NSPS Subpart Da), and as summarized in Appendix C of this permit. The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. The biomass fuel feed for each test run shall consist of at least 45% wood materials by weight. Testing of emissions shall be conducted with each cogeneration boiler operating at permitted capacity, which is defined as a heat input rate between 643 and 715 MMBtu/hour and firing 100% biomass. If it is impracticable to test at permitted capacity, a cogeneration boiler may be tested at less than the maximum permitted capacity; in this case, subsequent operation is limited to 110 percent of the test rate until a new test is conducted. Within three days of completing a test below permitted capacity, the permittee shall provide written notification of the restricted operational capacity to the Compliance Authority. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(7)(a)9, F.A.C. and 40 CFR 60.7, 60.8]
- e. *Test Methods:* Compliance with the emission limits specified in this permit shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

EPA Method*	Description
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits
3A	Gas analysis when needed for calculation of molecular weight or percent O <sub>2</sub>
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits
5	Particulate matter emissions
6 or 6C	Sulfur dioxide emissions
7 or 7E	Nitrogen oxide emissions
9	Visible emissions determination of opacity {Permitting Note: Although each unit is required to monitor opacity with a COMS, visible observations may also be used to demonstrate compliance.}
10	Carbon monoxide emissions
12	Inorganic lead emissions
19	Calculation of sulfur dioxide and nitrogen oxide emission rates
25A	Volatile organic compounds emissions {Permitting Note: EPA Method 18 may be conducted concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. Otherwise, all emissions measured by EPA Method 25A shall be considered "volatile organic compounds".}
29	Multiple metals emissions
101A	Particulate and gaseous mercury emissions

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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No other methods may be used to demonstrate compliance unless prior written approval is received from the Department in accordance with a permit modification or an alternate sampling procedure issued pursuant to 62-297.620, F.A.C. Other applicable testing requirements are included in Appendix C of the permit. The permittee shall use CEMS and COMS data to demonstrate compliance with the emissions standards for CO, NOx, opacity, and SO<sub>2</sub>. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

21. Continuous Monitor Requirements: The permittee shall demonstrate compliance with the emissions standards for CO, NOx, opacity, and SO<sub>2</sub> based on data collected from the continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS) required for each cogeneration boiler. Appendix E specifies the minimum requirements for monitoring equipment.
22. Quarterly Reports: For each cogeneration boiler, the permittee shall submit a quarterly report for each required continuous emissions and opacity monitoring system in accordance with the requirements specified in Appendix E of this permit. The permittee shall also submit a quarterly summary of the fuel analyses, fuel usage, and equipment malfunctions. The fuel usage summary shall include the monthly heat input and the 12-month rolling total heat input for the cogeneration boilers. For each malfunction, the report shall identify the cause (if known), and corrective actions taken. The quarterly reports and summaries shall be submitted to the Compliance Authority no later than 30 days following each calendar quarter.
23. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]



**SECTION IV. APPENDICES**

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- Appendix A. Citation Format
- Appendix B. General Conditions
- Appendix C. Standard Requirements
- Appendix D. Final BACT Determinations
- Appendix E. Continuous Monitor Requirements

**SECTION IV. APPENDIX A**  
**CITATION FORMAT**

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*The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.*

**REFERENCES TO PREVIOUS PERMITTING ACTIONS**

Old Permit Numbers

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* "AC" identifies the permit as an Air Construction Permit  
"AO" identifies the permit as an Air Operation Permit  
"123456" identifies the specific permit project number

New Permit Numbers

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

*Where:* "099" represents the specific county ID number in which the project is located  
"2222" represents the specific facility ID number  
"001" identifies the specific permit project  
"AC" identifies the permit as an air construction permit  
"AF" identifies the permit as a minor federally enforceable state operation permit  
"AO" identifies the permit as a minor source air operation permit  
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

*Example:* Permit No. PSD-FL-317

*Where:* "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality  
"FL" means that the permit was issued by the State of Florida  
"317" identifies the specific permit project

**RULE CITATION FORMATS**

Florida Administrative Code (F.A.C.)

*Example:* [Rule 62-213.205, F.A.C.]

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**SECTION IV. APPENDIX B**  
**GENERAL CONDITIONS**

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The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

**SECTION IV. APPENDIX B**  
**GENERAL CONDITIONS**

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Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (X);
  - b. Determination of Prevention of Significant Deterioration (X); and
  - c. Compliance with New Source Performance Standards (X).
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SECTION IV. APPENDIX C**  
**STANDARD REQUIREMENTS**

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*{Permitting Note: The following conditions are generally applicable to all emissions units.}*

**EMISSIONS AND CONTROLS**

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future 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 the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
4. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
5. VOC or OS Emissions: No person shall 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.]
6. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
7. 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 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
8. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

**TESTING REQUIREMENTS**

9. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
10. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
11. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
  - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions

**SECTION IV. APPENDIX C**  
**STANDARD REQUIREMENTS**

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compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

[Rule 62-297.310(4), F.A.C.]

12. Determination of Process Variables

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

13. Sampling Facilities: The permittee shall provide stack testing facilities and sampling locations in accordance with Rule 62-297.310(6), F.A.C.

14. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C. and 40 CFR 60.7, 60.8]

15. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

**RECORDS AND REPORTS**

16. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

17. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

18. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to each Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]

**SECTION IV. APPENDIX D**  
**FINAL BACT DETERMINATIONS**

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**PSD Applicability**

The existing facility is located in Palm Beach County, an area that is in attainment with (or designated as unclassifiable for) all air pollutants subject to a National Ambient Air Quality Standard (NAAQS). The cogeneration plant is classified as a fossil fuel-fired steam electric plant, which is one of the 28 PSD Major Facility Categories identified in Table 62-212.400-1, F.A.C. Potential emissions from the plant are greater than 100 tons per year for at least one regulated pollutant. As such, the facility is "major" with respect to the Prevention of Significant Deterioration (PSD) of Air Quality. The proposed project will result in net emissions increases for carbon monoxide, fluorides, sulfur dioxide, and sulfuric acid mist that are greater than the PSD significant emission rates identified in Table 62-212.400-2, F.A.C. Therefore, the project is subject to PSD review and the Department must determine the Best Available Control Technology (BACT) for these pollutants in accordance with Rule 62-212.400, F.A.C.

**Carbon Monoxide (CO)**

*BACT Standards:* 0.50 lb/MMBtu based on a 30-day rolling CEMS average, and  
0.35 lb/MMBtu based on a 12-month rolling CEMS average

*Control Technology:* CO emissions are minimized by good combustion practices.

*Compliance Method:* Compliance demonstrated by continuous emissions monitoring system (CEMS).

*Comments:* In 1993, the original project did not require a BACT determination because the result was a net CO emissions decrease of more than 8000 tons per year due to the shutdown of existing sugar mill boilers. The 2001 modification did not increase allowable emissions, but could result in a net increase of actual emissions. Therefore, a BACT determination was required for the existing cogeneration boilers.

**Fluorides (F1)**

*BACT Standard:* Fluoride emissions shall be minimized by firing biomass as the primary fuel with natural gas and very low sulfur distillate oil as auxiliary fuels.

*Control Technology:* Fluoride emissions minimized by firing clean fuels.

*Compliance Method:* Compliance assumed providing only authorized fuels are fired.

*Comments:* In 1993, the original project required a BACT determination for fluoride emissions due to the inclusion of coal as an emergency backup fuel. The 2001 modification removed the authorization to fire coal as well as the fluoride emissions standards when firing coal and distillate oil. Uncontrolled fluoride emissions from firing biomass, natural gas, and distillate oil are expected to be much less than 4 tons per year.

**Sulfur Dioxide (SO<sub>2</sub>)**

*BACT Standards:* 0.20 lb/MMBtu based on a 24-hour rolling CEMS average;  
0.10 lb/MMBtu based on a 30-day rolling CEMS average; and  
0.06 lb/MMBtu based on a 12-month rolling CEMS average

*Control Technology:* SO<sub>2</sub> emissions are minimized by firing biomass as the primary fuel with natural gas and very low sulfur distillate oil as auxiliary fuels (low sulfur fuels).

*Compliance Method:* Compliance demonstrated by continuous emissions monitoring system (CEMS).

*Comments:* In 1993, the original project required a BACT determination for SO<sub>2</sub> emissions due to the inclusion of coal as an emergency backup fuel. The 2001 modification removed the authorization to fire coal and resulted in a decrease in allowable SO<sub>2</sub> emissions. However, actual SO<sub>2</sub> emissions were expected to result in a significant net increase, which required a revised BACT determination for the existing cogeneration boilers.

**Sulfuric Acid Mist (SAM)**

*BACT Standard:* Potential SAM emissions shall be minimized by the effective control of SO<sub>2</sub> emissions with the firing of low sulfur fuels.

**SECTION IV. APPENDIX D**  
**FINAL BACT DETERMINATIONS**

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*Control Technology:* SAM emissions are minimized by firing biomass as the primary fuel with natural gas and very low sulfur distillate oil as auxiliary fuels (low sulfur fuels).

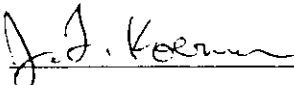
*Compliance Method:* Compliance assumed providing only authorized fuels are fired.

*Comments:* In 1993, the original project required a BACT determination for SAM emissions due to the inclusion of coal as an emergency backup fuel. The 2001 modification removed the authorization to fire coal and resulted in a decrease in allowable SAM emissions. However, actual SAM emissions were expected to result in a significant net increase, which required a revised BACT determination for the existing cogeneration boilers. Based on stack testing for the existing cogeneration boilers, SAM emissions are estimated to be 6% of the total SO<sub>2</sub> emissions.

**Final BACT Determinations**

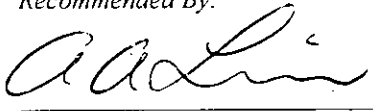
In accordance with Rule 62-212.400, F.A.C., the Department determines that the above standards represent the Best Available Control Technology (BACT) for the existing biomass cogeneration boilers. The Department's technical review and rationale for the BACT determinations are presented in Technical Evaluation and Preliminary Determination issued concurrently with the draft permit for this project.

*Determination By:*

  
\_\_\_\_\_  
J. F. Koerner, P.E., Project Engineer  
New Source Review Section


1-30-02  
(Date)

*Recommended By:*

  
\_\_\_\_\_  
C. H. Fancy, Chief  
Bureau of Air Regulation

1/30  
(Date)

*Approved By:*

  
\_\_\_\_\_  
Howard L. Rhodes, Director  
Division of Air Resources Management

1/31/02  
(Date)



**SECTION IV. APPENDIX E**  
**CONTINUOUS MONITOR REQUIREMENTS**

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*{Permitting Note: The following summarizes the basic monitoring requirements for the cogeneration boilers.}*

1. **Process and Control Parameters:** The permittee shall install, calibrate, maintain, and operate continuous monitoring systems to measure and record the following process and control equipment parameters:
  - a. **Power Output.** The net power generation (MW) delivered for sale to the electrical power grid shall be continuously monitored and recorded in 1-hour block averages.
  - b. **Fuel Feed Rate.** Fuel flow meters equipped with totalizers are required to monitor and record the fuel feed rates for distillate oil (gallons) and natural gas (million cubic feet). Biomass feed rates (tons of bagasse and tons of wood) shall be calculated and recorded based the weigh scales. The permittee shall continuously monitor the fuel input rate based on the fuel flow monitors calculating the maximum heat input rate (24 hour average) for each fuel during each day of operation.
  - c. **Steam Parameters.** Each cogeneration boiler shall be equipped with monitors to measure and record the steam temperature ( $^{\circ}$  F), steam pressure (psig), and steam production (pounds).
  - d. **Urea Injection Rate (SNCR System).** The urea injection rate shall be continuously monitored and recorded for each cogeneration boiler. The urea injection rate shall be compared to actual NO<sub>x</sub> emissions data recorded by the CEMS. The permittee shall identify minimum urea injection rates for various load conditions that ensure compliance with the NO<sub>x</sub> standards. Should the NO<sub>x</sub> CEMS be unavailable, the urea injection rate shall be maintained at an appropriate minimum level.
  - e. **Activated Carbon Injection Rate (Mercury Control System).** If the mercury injection system is reactivated, the carbon injection rate shall be continuously monitored and recorded. Based on the testing required in this permit, the permittee shall identify and maintain minimum carbon injection rates to ensure effective control of mercury emissions.

The permittee shall maintain written procedures for inspecting, calibrating, and maintaining the process and control monitoring equipment. [Rules 62-4.070 and 62-212.400(BACT), F.A.C.]

2. **CEMS and COMS:** For each cogeneration boiler, the permittee shall install, calibrate, maintain, and operate continuous emissions monitors (CEMS) and continuous opacity monitors (COMS) to measure and record emissions of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), oxygen (O<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and opacity in a manner sufficient to demonstrate compliance with the standards of this permit.
  - a. **Performance Specifications.** Each monitor shall be located in the ductwork between the electrostatic precipitator and the stack (or in the stack) to obtain emissions measurements representative of actual stack emissions. Each CEMS and COMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements.
    - (1) Opacity shall comply with Performance Specification 1 in Appendix B of 40 CFR 60.
    - (2) NO<sub>x</sub> and SO<sub>2</sub> CEMS shall comply with Performance Specification 2 in Appendix B of 40 CFR 60. The SO<sub>2</sub> reference method for the annual RATA shall be EPA Method 6 (or 6C) in Appendix A of 40 CFR 60. The NO<sub>x</sub> reference method for the annual RATA shall be EPA Method 7 (or 7E) in Appendix A of 40 CFR 60.
    - (3) O<sub>2</sub> CEMS shall comply with Performance Specification 3 in Appendix B of 40 CFR 60. The O<sub>2</sub> reference method for the annual RATA shall be EPA Method 3A Appendix A of 40 CFR 60.
    - (4) CO CEMS shall meet Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The CO reference method for the annual RATA shall be EPA Method 10 in Appendix A of 40 CFR 60.
  - b. **Data Collection.** Each CEMS and COMS shall record emissions data at all times including episodes of startup, shutdown, and malfunction. Emissions data recorded during periods of startup, shutdown, or malfunction may only be excluded from the compliance averages in accordance with the requirements specified in Section III of this permit. To the extent practicable, the permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions.

Each CEMS shall be designed and operated to sample, analyze, and record emissions data evenly spaced over a 1-

**SECTION IV. APPENDIX E**  
**CONTINUOUS MONITOR REQUIREMENTS**

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hour period. Each 1-hour average shall be computed using at least one data point in each fifteen minute quadrant of the 1-hour block during which the unit combusted fuel. Notwithstanding this requirement, each 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. All valid measurements or data points collected during a 1-hour block shall be used to calculate the 1-hour emission averages. CO, NO<sub>x</sub>, and SO<sub>2</sub> CEMS shall express the 1-hour emission averages in terms of "lb/MMBtu of heat input". O<sub>2</sub> CEMS shall express the 1-hour emission average in terms of "percent by volume". A 30-day rolling emission average shall be the average of all valid 1-hour emission averages collected during the 30-day period. A 12-month rolling emission average shall be the average of all valid 1-hour emission averages collected during the 12-month period. NO<sub>x</sub> and SO<sub>2</sub> CEMS shall comply with NSPS Subpart Da in 40 CFR 60.

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

- c. *Quality Assurance Procedures.* Each CEMS shall comply with the applicable quality assurance procedures specified in Appendix F of 40 CFR 60. These procedures include methods such as calibration, calibration drift, data recording, accuracy assessment, calculations, audit procedures, preventive maintenance, corrective actions, and reporting.
- d. *Monitor Availability.* Monitor availability shall not be less than 95% in any calendar quarter. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.
- e. *Other Applicable Requirements:* Each CEMS shall comply with the following applicable requirements Rules 62-204.800 and 62-297.520, F.A.C. (Continuous Monitor Performance Specifications); 40 CFR 60.13 (Subpart A - Monitoring Requirements); 40 CFR 60.47a (Subpart Da - Emissions Monitoring); 40 CFR 60.48a (Subpart Da - Compliance Determination Procedures and Methods); 60.49a (Subpart Da - Reporting Requirements).
- f. *Quarterly Reports:* For each cogeneration boiler, the permittee shall submit the report on the following page to summarize each required continuous emissions and opacity monitoring system. The authorized representative shall certify that the information provided in each quarterly report is true, accurate, and complete to the best of his/her knowledge. Each quarterly report is due no later than 30 days following the calendar quarter.

**QUARTERLY CONTINUOUS MONITOR SYSTEM (CMS) REPORTS**

<b>Facility Name</b> Okeelanta Cogeneration Plant		<b>ARMS ID No.</b> 0990332	<b>Title V Air Permit No.</b> 
<b>Facility Address/Location</b> Located off U.S. Highway 27 South, approximately six miles south of South Bay in Palm Beach County, Florida			
<b>Emissions Unit Description</b> Spreader stoker boiler with maximum heat input of 715 MMBtu/hour ARMS EU ID No. _____ Cogeneration Boiler: ___ A ___ B ___ C		<b>Unit Operation in Calendar Quarter</b> _____ hours	
<b>Control Equipment</b> Mercury - activated carbon injection; Nitrogen Oxides – low NOx burners and selective non-catalytic reduction (NOx) system; Particulate Matter – mechanical dust collectors and electrostatic precipitators			
<b>Primary Fuel</b> Biomass, which includes bagasse from adjacent sugar mill and wood material from area suppliers (clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter)		<b>Auxiliary Fuels</b> Pipeline-quality natural gas Distillate oil (≤ 0.05% sulfur by wt.)	
<b>Pollutant Monitored (Check one.)</b> ___ CO ___ NOx ___ SO2 ___ Opacity		<b>Calendar Quarter of Operation Covered (Check one.)</b> Year: _____ ___ 1 ___ 2 ___ 3 ___ 4	
<b>Continuous Monitor MS Information</b> Manufacturer: _____ Model No. _____ Date of last certification or audit: _____		<b>Emission Standards</b> _____ lb/MMBtu of heat input, 30-day rolling avg. _____ lb/MMBtu of heat input, 12-month rolling avg.	
<b>Emission Data Summary</b> 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown..... _____ b. Control equipment problems ..... _____ c. Process problems ..... _____ d. Other known causes ..... _____ e. Unknown causes ..... _____ 2. Total duration of excess emissions ..... _____ 3. $\frac{[\text{Total duration of excess emissions}] \times (100\%)}{[\text{Total source operating time}]}$ ..... _____ <i>Note: Report "excess emissions" as emission averages that are in excess of a permitted emissions standard. For gases, report excess emissions in terms of hours. For opacity, report excess emissions in terms of minutes.</i>		<b>CMS Performance Summary</b> 1. CMS downtime in reporting period due to: a. Monitor Equipment Malfunctions ..... _____ b. Non-Monitor Equipment Malfunctions ..... _____ c. Quality Assurance Calibration ..... _____ d. Other Known Causes ..... _____ e. Unknown Causes ..... _____ 2. Total CMS Downtime..... _____ 3. $\frac{[\text{Total CMS Downtime}] \times (100\%)}{[\text{Total source operating time}]}$ ..... _____ <i>If monitor availability is not at least 95%, provide a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability</i>	
<b>Emissions Data Exclusion</b> 1. Report the number of 1-hour emissions averages excluded the reporting period due to: a. Startup..... _____ b. Shutdown..... _____ c. Malfunction ..... _____ d. Total..... _____ 2. On a separate page, summarize each malfunction event, the cause (if known), and corrective actions taken. 3. On a separate page, describe any changes to CMS, process or controls during last quarter.			

Florida Department of  
Environmental Protection

Memorandum

TO: Howard Rhodes  
THRU: Clair Fancy *copy for CHF*  
Al Linero *ALH 1/30*  
FROM: Jeff Koerner *JK*  
DATE: January 30, 2002  
SUBJECT: Air Permit No. PSD-FL-196M  
Project No. 0990332-014-AC  
New Hope Power Partnership - Okeelanta Cogeneration Plant  
Palm Beach County

The final permit for this project is attached for your approval and signature. New Hope Power Partnership owns and operates the Okeelanta Cogeneration Plant located adjacent to Okeelanta Corporation's sugar mill and refinery, which is approximately six miles south of South Bay and off of U.S. Highway 27 in Palm Beach County. The cogeneration plant was previously owned and operated by the Okeelanta Power Limited Partnership. This permit modification: revises emissions limiting and monitoring provisions for emissions of carbon monoxide, fluorides, lead, mercury, sulfur dioxide, and sulfuric acid mist; removes the authority to fire low sulfur coal as a backup fuel; and removes the requirement to conduct stack testing for chromium, copper and arsenic. In addition, this modification updates the permit format and incorporates all previous permit modifications into a single document.

The Department distributed an "Intent to Issue Permit" package on December 20, 2001. The applicant published the "Public Notice of Intent to Issue" in The Palm Beach Post on December 29, 2001. The Department received proof of publication on January 7, 2002. No requests for administrative hearings were filed.

Day #90 is April 9, 2002. I recommend your approval of the attached Final Permit for this project.

Attachments

HLR/CHF/AAL/jfk

*Howard - Nothing  
big here. Removes  
unnecessary tests,  
revises CO limits.  
Also removes coal firing  
with their consent.  
They did not build  
coal handling facilities.  
al*

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Rodney Williams  
 Plant Manager  
 New Hope Power Partnership  
 Okeelanta Cogeneration Plant  
 PO Box 9  
 South Bay, FL 33493

2. Article Number (Copy from service label)

7000 2870 0000 7028 3246

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

D. M. Williams 2-4-02

C. Signature  Agent  AddresseeD. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below:3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.4. Restricted Delivery? (Extra Fee)  Yes
**U.S. Postal Service  
 CERTIFIED MAIL RECEIPT  
 (Domestic Mail Only; No Insurance Coverage Provided)**

7000 2870 0000 7028 3246

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	

Sent To  
 Rodney Williams  
 Street, Apt. No., or PO Box No.  
 P. O. Box 9  
 City, State, ZIP+4  
 South Bay, FL 33493

PS Form 3800, May 2000

See Reverse for Instructions.