

Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

September 8, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Gus Cepero, Authorized Representative
Osceola Power Limited Partnership
P. O. Box 606
Pahokee, FL 33476

Re: Project No. 0990331-008-AC (PSD-FL-197G)
Osceola Power L.P. – Cogeneration Plant
Request for Extension of Operation of Mill Boilers (Revised Draft)

Dear Mr. Cepero:

The Department issued an initial Draft Permit on May 18, 2000. Enclosed is a revised Draft Permit that replaces the previous draft, extends operation of Osceola Farms' sugar mill boilers to, and provides additional time to restart Osceola Power L.P.'s cogeneration plant located in Palm Beach County, Florida. This is the fourth such modification of this PSD construction permit. Absent extraordinary circumstances, the Department anticipates that future requests to extend operation of the sugar mill boilers as a condition of this PSD permit will be denied.

In accordance with Permit No. PSD-FL-197, authorization to operate the sugar mill boilers has expired. This Draft Permit modification would allow operation of the sugar mill boilers from October 1, 2000 through April 30, 2001. Contingent on the installation of mechanical dust collectors for the cogeneration boilers, operation of the sugar mill boilers would be extended to include the following milling season of October 1, 2001 through April 30, 2002. No later than August 1, 2002, the Draft Permit modification requires the permittee to either permanently shutdown the sugar mill boilers or surrender this PSD permit to the Department. A surrender of the PSD permit would relinquish the authorization to operate the cogeneration plant. Furthermore, the Department will give no consideration to any existing equipment associated with the cogeneration plant in future permitting decisions. However, surrender of the PSD permit would allow the facility to continue operation of the sugar mill boilers in accordance with the Title V operation permit.

Also included in this package are the Department's *Intent to Issue Air Construction Permit Modification*, *Public Notice of Intent to Issue Air Construction Permit Modification*, *Technical Evaluation and Preliminary Determination*, and *Revision Summary*. The *Public Notice of Intent to Issue Air Construction Permit Modification* must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Jeff Koerner at 850/414-7268.

Sincerely,


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

CHF/AAL/jfk
Enclosures

"More Protection, Less Process"

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Name (Please Print Clearly) (to be completed by mailer)
 Mr. Gus Cepero, Osceola Power LP
 Street, Apt. No. or P.O. Box No.
 P.O. Box 606
 City, State, ZIP+4
 South Bay, FL 33476

PS Form 3800, July 1999

See Reverse for Instructions

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:

Gus Cepero, Vice President
 Osceola Power LP
 P. O. Box 606
 South Bay, FL 33476
 Pahokee

2. Article Number (Copy from service label)
 7099 3400 0000 1453 2450

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) *VIVIAN DAVIS* B. Date of Delivery *9-19-00*

C. Signature *Vivian Davis* ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

In the Matter of an
Application for Permit by:

Gus Cepero, Authorized Representative
Osceola Power Limited Partnership
P. O. Box 606
Pahokee, FL 33476

Project No. 0990331-008-AC
PSD Permit No. PSD-FL-197G
Extension of Sugar Mill Boiler Operation
Palm Beach County
Revised Draft Permit

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of revised Draft Permit attached) for the proposed project, detailed in the application specified above and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Osceola Power L.P., applied on September 28, 1999 to the Department for an air construction permit modification to extend standby operation of the sugar mill boilers. Osceola Power L.P. (OsPLP) constructed a cogeneration plant adjacent to the Osceola Farms sugar mill located east of Pahokee in Palm Beach County, Florida. The cogeneration plant fires bagasse and wood to produce steam to meet the needs of the sugar mill and to generate electrical power for sale. The cogeneration plant was designed to completely replace the existing sugar mill boilers. For the purposes of the Department's Prevention of Significant Deterioration (PSD) and Title V operating permit programs, the two plants are considered a single facility. The original PSD application used the shutdown of the sugar mill boilers as emissions decreases, which allowed the new plant to net out of BACT determinations for several pollutants. The original PSD permit did allow limited operation of the mill boilers as standby units during a phase-in period of the cogeneration plant. However, it also required permanent shutdown of the sugar mill boilers by January 1, 1999, which the Department later extended to April 1, 2001.

The Department issued an initial Draft Permit on May 18, 2000. This revised Draft Permit addresses several issues and replaces the previous draft. The revised draft permit modification provides up to an additional two years to restart the cogeneration plant and reestablish reliable fuel and steam interconnections with the sugar mill in accordance with the specific conditions. This is the fourth such modification of this PSD construction permit. Absent extraordinary circumstances, the Department anticipates that future requests to extend operation of the sugar mill boilers as a condition of this PSD permit will be denied.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to perform proposed work.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed *Public Notice of Intent to Issue Air Construction Permit Modification*. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of *Public Notice of Intent to Issue Air Permit*

Modification. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.


The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for

the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.


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

CERTIFICATE OF SERVICE

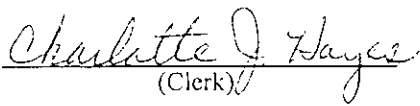
The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit Modification package (including Public Notice of Intent to Issue Air Construction Permit Modification, Draft Permit, Technical Evaluation and Preliminary Determination, and Revision Summary) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/11/00 to the persons listed below.

Mr. Gus Cepero, Osceola Power L.P.*
Mr. Carlos Rionda, Osceola Farms
Mr. James Meriwether, Osceola Power L.P.
Mr. David Buff, Golder Associates
Mr. David Dee, Landers & Parsons

Mr. James Stormer, PBCHD
Mr. David Knowles, 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.


(Clerk)
9/11/00
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project No. 0990331-008-AC

Draft Permit No. PSD-FL-197G

Osceola Power L.P. Cogeneration Plant
Palm Beach County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Osceola Power L.P. (OsPLP) to extend the operation of the Osceola Farms sugar mill boilers. OsPLP constructed a cogeneration plant adjacent to the Osceola Farms sugar mill located east of Pahokee in Palm Beach County, Florida. The cogeneration plant is designed to fire bagasse and wood to produce steam to meet the needs of the sugar mill and to generate electrical power for sale. The cogeneration plant is a major source with respect to the Prevention of Significant Deterioration (PSD) program, Rule 62-212.400, F.A.C., because it is a steam electric generating plant with emissions greater than 100 tons per year for at least one regulated pollutant such as carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and volatile organic compounds. The authorized representative of Osceola Power Limited Partnership is Mr. Gus Cepero and his mailing address is P.O. Box 606, Pahokee, FL 33476.

The cogeneration boilers minimize CO and VOC emissions by high temperature, thermally efficient combustion. Urea injection is used to reduce NOx emissions through selective non-catalytic reduction. Electrostatic precipitators control particulate matter emissions. Activated carbon is injected to reduce mercury and other metal vapor emissions. Although the cogeneration plant was constructed and tested in 1996, operations were shutdown in 1997. In the original PSD permit, OsPLP specifically requested shutdown of the sugar mill boilers so that the emissions decreases could be used to net out of determinations of Best Available Control Technology (BACT) for several pollutants.

The proposed draft permit includes specific conditions that allow up to an additional two years to operate the sugar mill boilers in order to restart the cogeneration plant and to reestablish reliable fuel and steam interconnections with the sugar mill. It also requires that either the sugar mill boilers must be permanently shut down and rendered incapable of operation or else the PSD permit for the cogeneration plant must be surrendered to the Department, no later than August 1, 2002. Although low sulfur coal was initially an approved fuel, no coal handling, storage, or other related facilities have been installed. Therefore, the permittee must obtain appropriate air construction permits prior to firing coal as a fuel. A mechanical dust collection system must be installed prior to the electrostatic precipitator for each cogeneration boiler to enhance control of particulate matter. A flue gas oxygen monitor with audible alarm must be installed on each sugar mill boiler to promote efficient combustion practices. Fuel oil purchased for the sugar mill boilers shall be reduced to no more than 1.0% sulfur by weight. Although this modification should not result in any changes to the original air quality impacts evaluated for the initial PSD permit, the draft permit requires a revised Air Quality Analysis to validate impacts during potential simultaneous operations. The Department believes this permitting action provides sufficient time to restart the cogeneration boilers while maintaining the intent of the original PSD permit.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection	Department of Environmental Protection	Palm Beach County Health Department
Bureau of Air Regulation	South District Office	Air Pollution Control Section
111 S. Magnolia Drive, Suite 4	2295 Victoria Avenue, Suite 364	P.O. Box 29 (901 Evernia Street)
Tallahassee, Florida 32301	Ft. Myers, Florida 33902-2549	West Palm Beach, Florida 33402-0029
Telephone: 850/488-0114	Telephone: 941/332-6975	Telephone: 561/355-3136
Fax: 850/922-6979	Fax: 941/332-6969	Fax: 561/355-2442

The complete project file includes the application, technical evaluation, draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

REVISED DRAFT PERMIT MODIFICATION

PERMITTEE

Osceola Power Limited Partnership
Osceola Cogeneration Plant
P. O. Box 606
Pahokee, FL 33476

Authorized Representative:

Gus Cepero, Vice President of Sol Energy, the General
Partner of Osceola Power Limited Partnership

<u>Permit No.</u>	<u>PSD-FL-197G</u>
<u>Project No.</u>	<u>0990331-008-AC</u>
<u>SIC Nos.</u>	<u>2061 – Sugar Processing</u> <u>4911 – Electric Generation</u>
<u>Expires:</u>	<u>August 1, 2002</u>

PROJECT AND LOCATION

Osceola Power L.P. proposes to restart, test, and operate the biomass-fired cogeneration boilers in order to
satisfactorily complete the fuel and steam interconnections between the cogeneration plant and the sugar mill
located east of Pahokee in Palm Beach County, Florida. The UTM coordinates are Zone 17, 544.2 km E and
2968.0 km N.

STATEMENT OF BASIS

This construction permit modification is issued under the provisions of Chapter 403 of the Florida Statutes
(F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-
297. Issuance of this permit modification does not make any new determinations of Best Available Control
Technology. The above named permittee is authorized to perform the work in accordance with the conditions
of this permit and as described in the application, approved drawings, plans, and other documents on file with
the Department of Environmental Protection (Department). This modified permit supplements original air
construction Permit No. PSD-FL-197, major Permit Modification No. PSD-FL-197A, and incorporates all other
subsequent applicable modifications.

APPENDICES

The attached appendices are a part of this permit:

<u>Appendix GC</u>	<u>General Permit Conditions</u>
<u>Appendix ES</u>	<u>Emission Summary</u>
<u>Appendix XS</u>	<u>CEMS Excess Emissions Report</u>

DRAFT

<u>Howard L. Rhodes, Director</u>	<u>Revision Date</u>
<u>Division of Air Resources Management</u>	

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION I. FACILITY INFORMATION

FACILITY DESCRIPTION

This facility consists of the following two plants:

Sugar Mill: Sugarcane is harvested from nearby fields and transported to the mill by truck. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze the juice from the cane. The cane juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide process steam for the mill. The primary air pollution sources consist of five bagasse-fired boilers, which include wet scrubbers for particulate matter control. As part of the original PSD permit for the cogeneration plant, the permittee is required to permanently shutdown the sugar mill boilers.

Cogeneration Plant: ~~Construct~~ This is a 74 (gross) megawatt (MW), electrical power, (1-hour average), cogeneration facility (biomass--bagasse and wood waste material as the primary fuel and $\frac{1}{2}$ No. 2 oil as a supplementary fuel, and low-sulfur coal as an alternate fuel) located adjacent to the at Osceola Farms' sugar mill that is east of Pahokee, Palm Beach County, Florida. The cogeneration facility contains two ABB Model VU-4¹ (~~or equivalent~~) spreader-stoker steam boilers with a design heat input for each boiler of 760 million British thermal units per hour (MMBtu/hr) on biomass ~~or~~ 600 MMBtu/hr on No. 2 fuel oil, and 530 MMBtu/hr on coal. Each boiler will produce approximately 506,000 lbs/hr of steam at 1,540 pounds per square inch gauge (psig) and 955° F. Particulate matter, nitrogen oxides, and mercury emissions from each boiler will be controlled by Flakt, Inc. (~~or equivalent~~) electrostatic precipitator, Thermal DeNOx (~~or equivalent~~) selective non-catalytic reduction system, and an activated carbon injection (~~or equivalent~~) system, respectively. Auxiliary equipment includes a 50,000 gallon No. 2 fuel oil storage tank, feed and ash handling systems, steam turbines and condensers, electrical power generators, cooling towers, and stacks that are 8.0 ft. in diameter and a minimum 200 ft. high.

EMISSIONS UNITS

This permitting action authorizes the restart, testing, and operation of the cogeneration boilers to satisfactorily complete the fuel and steam interconnections between the cogeneration plant and the sugar mill. Emissions units addressed by this permit include the following.

<u>EU ID No.</u>	<u>Emissions Unit Description</u>
<u>Facility ID No. 0990019 – Osceola Farms Company Sugar Mill</u>	
<u>SIC No. 2061 – Raw Cane Sugar Processing</u>	
<u>001</u>	<u>Sugar Mill Boiler No. 1 (Inactive – permanently dismantled and removed.)</u>
<u>002</u>	<u>Sugar Mill Boiler No. 2</u>
<u>003</u>	<u>Sugar Mill Boiler No. 3</u>
<u>004</u>	<u>Sugar Mill Boiler No. 4</u>
<u>005</u>	<u>Sugar Mill Boiler No. 5</u>
<u>006</u>	<u>Sugar Mill Boiler No. 6</u>
<u>007</u>	<u>Lime Silo</u>
<u>Facility ID No. 0990331 – Osceola Power L.P. Cogeneration Plant</u>	
<u>SIC No. 4911 - Electric Services</u>	
<u>001</u>	<u>Cogeneration Boiler No. 1</u>
<u>002</u>	<u>Cogeneration Boiler No. 2</u>

{Permitting Note: Conditions in this permit related to the sugar mill boilers are in addition to any applicable requirements in all valid air construction and operation permits.}

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION I. FACILITY INFORMATION

REGULATORY CLASSIFICATION

PSD Major Source: This facility is classified as a fossil fuel-fired steam electric plant, one of the industries included in the list of the 28 Major Facility Categories identified in Table 62-212.400-1, F.A.C. Emissions are greater than 100 tons per year for at least one criteria pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC). Therefore, the facility is a major facility with respect to Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Title III: Based on the revised Title V application, this facility may be an existing major source of hazardous air pollutants (HAPs).

Title IV: Based on the revised Title V application, this facility is not subject to the Acid Rain provisions of Title IV of the 1990 Clean Air Act, as amended.

Title V: This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as CO, NO_x, PM/PM₁₀, SO₂, or VOC exceeds 100 tons per year.

NSPS Sources: This permit addresses emissions units for the cogeneration plant that are subject to New Source Performance Standards including 40 CFR 60, Subpart Da for the cogeneration boilers and 40 CFR 60, Subpart Kb for the fuel oil storage tank.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- All applications and pertinent correspondence related to the following permitting actions: original Project No. AC50-219795 (Permit No. PSD-FL-197) issued on September 27, 1993; letter amendment (Permit No. PSD-FL-197) issued on April 12, 1994; major Modification No. 0990331-001-AC (Permit Nos. AC50-269980 and PSD-FL-197A) issued on October 16, 1995; Project No. 0990331-002-AC (Permit No. PSD-FL-197A) issued on June 14, 1996; Project No. 0990331-003-AC (Permit No. PSD-FL-197B) issued on January 22, 1997; Project No. 0990331-004-AC (Permit No. PSD-FL-197D) issued on April 18, 1997; Project No. 0990331-005-AC (Permit No. PSD-FL-197D) issued on May 5, 1997; Project No. 0990331-006-AC (Permit No. PSD-FL-197E) issued on October 21, 1997; and Project No. 0990331-007-AC (Permit No. PSD-FL-197F) issued on June 15, 1998.
- Request dated 09/28/99 to modify Permit No. PSD-FL-197F to extend simultaneous operation and permanent shutdown of the sugar mill boilers.
- Additional information provided by the applicant on 01/19/00, 01/21/00, 03/02/00, 03/06/00, and 03/23/00.
- Comments from the Palm Beach County Health Department dated 10/15/00 and (draft).
- EPA's comments dated (draft).
- NPS's comments dated (draft).

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SECTION II. COMMON CONDITIONS

ADMINISTRATIVE REQUIREMENTS

1. **Permitting Authorities:** All documents related to applications for permits to construct or modify an emissions unit in accordance with the PSD regulations should be submitted to the Bureau of Air Regulation (BAR) of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. All documents related to applications for permits to operate (including Title V) or to construct new PSD-minor projects shall be submitted to the South District Office of the Florida Department of Environmental Protection at 2296 Victoria Avenue, Suite #364, Fort Myers, Florida 33902-2549 and phone number 941/332-6975.
2. **Compliance Authorities:** All documents related to compliance activities such as reports, tests, and notifications should be submitted to the Department's South District Office (listed above) and the Palm Beach County Health Department at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida 33402-0029 and phone number 561/355-3136. Copies of all documents required by this permit shall also be sent to the Department's Bureau of Air Regulation at the address listed above.
3. **General Conditions:** The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
4. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions units 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, 62-214, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 52, 60, and 72.6(b)(4) of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. 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.]
5. **PSD Expiration:** Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]
6. **Permit Expiration:** For good cause, the permittee may request that this PSD air construction permit be extended except as limited by Specific Condition No. 17 in Section III of this permit. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
7. **BACT Determination:** In conjunction with extension of the 18 month period to commence or continue construction, phasing of the project, or an extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for the source. [Rule 62-212.400(6)(b), F.A.C. and 40 CFR 52.166(j)(4)]
8. **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.]

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9. **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.]
10. **Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit in accordance with the requirements of Rule 62-213.420(1), F.A.C. To apply for a 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 be submitted to the Department's Bureau of Air Regulation with copies to the Compliance Authorities. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

EMISSIONS AND CONTROLS

11. **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.]
13. **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.]
14. **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. These emissions shall be included in the calculation of all averages for emissions with standards subject to continuous emissions monitoring requirements. [Rule 62-210.700(4), F.A.C.]
15. **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 the 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.]

TESTING REQUIREMENTS

16. **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]
17. **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.]
18. **Applicable Test Procedures**
- 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 compliance test shall be sixty (60) minutes. The observation period shall

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include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)1. and 2., F.A.C.]

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

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

20. 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

21. 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.]

REPORTS

22. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the 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.]

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.]

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

CONSTRUCTION DETAILS

1. Construction of the proposed cogeneration facility shall reasonably conform to the plans described in the application ~~and~~ ~~or~~ permit. The facility shall be designed, constructed, and operated so that its gross generating capacity shall not exceed 74 megawatts (MW), 1 hour average. The permittee shall provide the Department with engineering, monitoring, and reporting plans for the generation capacity of the facility at least 60 days before restarting the cogeneration plant ~~within 30 days after the plans become available.~~
2. Cogeneration Boiler Nos. 1 and 2 shall each be of the spreader stoker type with a maximum heat input of 760 million British thermal units per hour (MMBtu/hr) with biomass fuel ; or 600 MMBtu/hr with No. 2 fuel oil ; ~~and 530 MMBtu/hr with coal.~~
3. Each boiler shall have an individual stack, and each stack must have a minimum height of 200 feet. The stack sampling facilities for each stack must comply with Rule 62-297.310(6)~~345~~, F.A.C.
4. Each boiler shall be equipped with instruments to measure the fuel feed rate, steam production, steam pressure, and steam temperature.
5. Each boiler shall be equipped with a:
 - Mechanical dust collection system consisting of 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);
 - Electrostatic precipitator (ESP) designed for at least 99 percent removal of particulate matter;
 - Selective non-catalytic reduction (SNCR) system designed for at least 40 percent removal of NO_x; and
 - Carbon injection system ~~(or equivalent)~~ for mercury emissions control.
6. The permittee shall install and operate continuous monitoring devices for each main boiler exhaust for opacity, nitrogen oxides (NO_x), sulfur dioxide (SO₂), oxygen (O₂), and carbon monoxide (CO). The monitoring devices shall meet the applicable requirements of Rule ~~62-297.520~~ ~~62-296.405~~, F.A.C. and 40 CFR 60.47a. The opacity monitor shall be placed in the ductwork between the electrostatic precipitator and the stack or in the stack.

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 maintain air/fuel ratio parameters at an optimum. Operating procedures shall be established based on the initial emission compliance tests required by Specific Condition No. 20 below. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" shall be used as a guide. ~~An operating plan~~ A "Good Combustion Practices Plan" shall be submitted to the Department at least 60 days before restarting the cogeneration plant ~~within 90 days of completion of such tests.~~
7. For the mechanical dust collectors, electrostatic precipitator, the selective non-catalytic reduction process (SNCR), and the activated carbon injection mercury control system ~~(equivalent controls allowed)~~:
 - a. The permittee shall submit to the Department copies of technical data pertaining to the selected particulate matter (PM), NO_x, and mercury emission controls at least 60 days before restarting the cogeneration plant ~~within thirty (30) days it becomes available.~~ These data should include, but not be limited to, guaranteed efficiency and emission rates and major design parameters.
 - b. At least 60 days before restarting the cogeneration plant, the permittee shall submit an updated process flow diagram indicating the relative locations and functions of the major pieces of equipment.

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including: boilers, economizers, air heaters, steam turbines, electrical generators, steam flow meters, sugar mill interconnection, the fuel storage and feed systems, the activated carbon storage and injection points, the urea storage and injection points, the monitoring locations for each CEMS, the mechanical dust collectors, the electrostatic precipitators, the ID fans, and stacks. The flow diagram shall indicate approximate fuel flow rates and heat inputs, steam temperature, pressure and production rates, electrical generating capacity, boiler furnace temperatures, urea injection rates, activated carbon injection rates, electrostatic precipitator parameters, exhaust gas flow rates, temperatures and velocities, and pollutants monitored by CEMS. On the exhaust gas side of the boiler, the flow diagram shall identify the approximate temperature (° F) and draft losses (inches of w.c.) after each piece of equipment.

8. 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 a 0.01 grains per actual cubic foot (gr/acf) outlet dust loading. The permittee shall submit to the Department copies of technical data pertaining to the selected particulate matter emissions control for the mercury control system reactant storage silos at least 60 days before restarting the cogeneration plant ~~within thirty (30) days after it becomes available~~. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters.
 - b. The fly ash handling system (including transfer points and storage bin) shall be enclosed. The ash shall be wetted in the ash conditioner to minimize fugitive dust prior to it being discharged into the disposal bin.
9. At least 60 days before restarting the cogeneration plant, Prior to operation of the source, the permittee shall submit to the Department an revised operation and maintenance plan that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. At a minimum, the plan shall include the critical control parameters for the electrostatic precipitators, the selective non-catalytic reduction (SNCR) system, the carbon injection system, and the air/fuel ratio with oxygen content for optimum combustion efficiency. The plan shall specify a target operational range for each parameter as specified by the equipment manufacturer as well as recommended actions to correct common problems related to the control equipment.
10. During land clearing and site preparation, wetting operations or other soil treatment techniques appropriate for controlling unconfined particulates, including grass seeding and mulching of disturbed areas, shall be undertaken and implemented. Any open burning of land clearing debris on this site shall be performed in compliance with Department regulations.

OPERATIONAL AND EMISSION RESTRICTIONS

11. The ~~proposed~~ cogeneration facility steam generating units shall be constructed and operated in accordance with the capabilities and specifications described in the application and ~~or~~ permit. The facility shall not exceed 74 (gross) megawatts generating capacity, 1 hour average. The maximum heat input rate for each steam generator shall not exceed 760 MMBtu/hr when burning 100 percent biomass or ~~or~~ 600 MMBtu/hr when burning 100 percent No. 2 fuel oil or ~~or~~ 530 MMBtu/hr when burning low-sulfur coal. Maximum heat input to the entire facility (total of two boilers) shall not exceed 8.208×10^{12} Btu per year. Steam production of each boiler shall not exceed an average of 506,000 lbs/hr at 1,540 psig, 955° F.
12. The primary fuel for the facility shall be biomass - bagasse and wood ~~waste~~ material. Authorized wood ~~waste~~ material is clean construction and demolition wood debris, yard trash (such as tree trimmings), land clearing debris, and other clean cellulose and vegetative matter.

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The fuel used at the cogeneration facility shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The biomass fuel used at the cogeneration facility shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. ~~The permittee shall not use any delivered fuel that contains an amount of treated or painted wood which, if burned, would cause an exceedance of any of the Department's Acceptable Ambient Concentrations (AAC).~~ The wood waste shall not contain more than 56.7 parts per million (ppm) arsenic or 67.3 ppm chromium or 53.2 ppm copper based on analysis of a composite sample of the fuel.

The permittee shall perform a daily visual inspection of any wood waste or similar vegetative matter that has been delivered to the facility 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 waste and vegetative matter.

The permittee shall design and implement a management and testing program for the wood waste and other materials delivered to the facility 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. ~~This A revised Fuel Management pProgram shall be submitted to the Department's Bureau of Air Regulation and Compliance Authorities for review and approval at least 60 days before restarting the cogeneration plant the commencement of operations of the cogeneration facility.~~ At a minimum, 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. Fuel scheduled for burning shall be inspected daily. Fuel tests shall be conducted on a weekly basis after restarting the cogeneration plant. Based on at least 12 consecutive months of satisfactory fuel test data, the permittee may request Department approval of a revised testing schedule by applying for a modified Title V air operation permit, ~~weekly for the first year of operations at the facility and monthly thereafter, if the Department determines on the basis of the prior test results that less frequent testing is appropriate.~~

13. Any fuel oil burned in the cogeneration facility shall be "new" No. 2 fuel 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 means an oil which has been refined from crude oil and has not been used in any manner that may contaminate it.
14. Prior to firing any fuel other than very low sulfur distillate oil or biomass as authorized by this permit, the permittee shall obtain the appropriate air construction permits from the Bureau of Air Regulation. {Permitting Note: The initial application and specifications indicated that each spreader-stoker steam boiler is designed to fire a maximum of 530 MMBtu/hr of low sulfur coal. The original PSD air construction permit included specific emission standards for Be, CO, FL, Hg, NOx, Pb, PM, P10, SO2, and VOC when firing low sulfur coal. The standards for beryllium, fluorides, and sulfur dioxide represented the Department's determination of Best Available Control Technology (BACT). The Department's initial SO2 BACT determination was based on a very limited amount of coal firing as requested by the applicant (revised to 14,883 tons during any 12-month period), a fuel specification of no more than 0.7% sulfur by weight, and a maximum SO2 emission rate of 1.2 lb/MMBtu. However, coal-handling facilities were never constructed and the cogeneration plant never fired coal. Future requests to fire coal as an authorized fuel will require a PSD applicability review and appropriate, current BACT determinations for the coal handling facilities and cogeneration boilers. Any coal burned in the facility shall be low sulfur coal with a maximum sulfur content of 0.70 percent and a maximum potential emission equivalent to 1.2 lbs SO2/MMBtu.

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15. ~~The combined use of coal and oil. Total fossil fuel firing shall be less than 25 percent of the total heat input to each cogeneration boiler on a calendar quarter basis. The consumption of low sulfur coal shall not exceed 14,883 tons during any 12-month period (12-month rolling average).~~
16. The permittee shall maintain a daily log of the amounts and types of fuels used. The amount, heating value, ~~beryllium content (coal only)~~, sulfur content, and equivalent SO₂ emission rate (in lb/MMBtu) of each fuel oil ~~and coal~~ delivery shall be kept in a log for at least two years. For each calendar month, the calculated SO₂, mercury, and lead emissions and 12-month rolling ~~totals~~ average shall be determined (in tons) and kept in a log.
17. In accordance with the following conditions, the permittee may retain and operate the sugar mill boilers until commercial operation of the cogeneration boilers is reestablished:

a. The permittee shall submit a new Air Quality Analysis for the following two cases:

- 1) Simultaneous operation of one cogeneration boiler with all of the sugar mill boilers; and
- 2) Simultaneous operation of both cogeneration boilers with all of, or a combination of the sugar mill boilers.

Each analysis shall be based upon a current major source inventory and the maximum permitted capacity for each boiler. The Air Quality Analysis must provide reasonable assurance that each proposed project scenario, subject to the conditions of all permits, will not cause or significantly contribute to a violation of any Ambient Air Quality Standard or Prevention of Significant Deterioration increment. The analysis shall be submitted by the applicant and approved by the Department prior to any simultaneous operation of the sugar mill and cogeneration boilers. If special constraints are necessary to satisfy modeling requirements, the permittee shall operate only in accordance with those constraints. The Department shall revise this permit or the Title V permit to include any such constraints assumed by the permittee in the Air Quality Analysis.

- b. Prior to restarting the cogeneration plant, sugar mill boilers nos. 2, 3, 4, 5, and 6 are permitted to operate from October 1, 2000 through April 30, 2001. The permittee shall only operate the sugar mill boilers in compliance with all valid air construction and operation permits as well as any constraints imposed by the Air Quality Analysis required above. This condition does not authorize operation of any sugar mill boiler beyond the limits specified in any applicable air construction or operation permit. Each sugar mill boiler shall be tested for emissions in accordance with all valid permits as well as for NO_x and VOC emissions to demonstrate compliance with Rule 62-296.570, F.A.C. In addition, if the permittee commences installation of the mechanical dust collection system prior to September 1, 2001, the sugar mill boilers are permitted to operate from October 1, 2001 through April 30, 2002. To demonstrate compliance with this requirement, the permittee shall submit documents to the Bureau of Air Regulation and the Compliance Authorities that indicate the date the mechanical dust collection equipment was delivered to the plant and the bill of sale.
- c. From the initial restart of the cogeneration plant until the establishment of reliable fuel and steam interconnections with the sugar mill, the sugar mill boilers are permitted to operate simultaneously with the cogeneration boilers subject to the conditions of this permit, the conditions of all applicable air construction and operation permits, and any constraints imposed by the Air Quality Analysis required above. Simultaneous operation of any sugar mill boilers with one or both of the cogeneration boilers shall not exceed 2880 total hours. After 2880 total hours of simultaneous operation or the establishment of a reliable steam interconnection with the mill, the sugar mill boilers shall operate only if both cogeneration boilers are inoperable due to electrical or mechanical failure and are shut down or in the process of immediately shutting down. During the sugarcane milling season (October 1st

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through April 30th), steam produced in the cogeneration boilers in excess of 13,680,000 pounds of steam during any day shall be delivered to the Osceola Farms' sugar mill and the steam production from the sugar mill boilers shall be reduced by an equivalent amount. The operator shall maintain a written record of the date and daily steam production rate for each hour of simultaneous operation.

- d. In no case shall the permittee operate the sugar mill boilers pursuant to this permit after **April 30, 2002**. No later than **August 1, 2002**, the permittee shall either permanently shutdown and render incapable of operation each sugar mill boiler or surrender this PSD permit to the Department and thereby relinquish authorization to operate the cogeneration plant. The Title V permit shall be revised accordingly. {Permitting Note: If the PSD permit for the cogeneration plant is surrendered, the Department will give no consideration to any existing equipment at the cogeneration plant in future permitting decisions. However, surrender of the PSD permit would allow continued operation of the sugar mill boilers in accordance with the Title V permit.}
- e. In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate, and maintain a process monitor to continuously monitor the flue gas oxygen content of each sugar mill boiler. A visible display of the flue gas oxygen content with an audible alarm for each boiler shall be installed in the boiler control room to provide feedback to the operators. The alarm shall be set to sound any time the flue gas oxygen content drops below 3% or exceeds 10% to prompt the operator to make corrective adjustments of the combustion air, boiler draft, fuel flows, or other appropriate parameters to ensure efficient combustion. The applicant may request an amendment of this permit to revise the acceptable range of the flue gas oxygen content based on additional CO, NOx, and VOC performance testing. Each oxygen process monitor shall be installed and functioning properly prior to **October 15, 2000**. At four-hour intervals, the operator shall record the date, time, steam production rate (lb/hour), and oxygen content for each boiler in operation. During each stack test, the oxygen content shall be recorded at 15-minute intervals. These requirements shall become part of any subsequent air construction and operation permits for the sugar mill boilers.
- f. The permittee shall purchase only fuel oil containing no more than 1.0% sulfur by weight for use in the sugar mill boilers. For each fuel oil delivery, the permittee shall obtain documentation from the vendor of the amount of fuel oil purchased (gallons), the sulfur content (percent by weight), and the test method used to determine the sulfur content. The fuel oil sulfur content shall be determined by ASTM Methods D 129-91, D 2622-94, D 4294-90 or other equivalent methods approved by the Department. At least once during each sugarcane crop season, the permittee shall sample and analyze each tank of fuel oil stored for use by the sugar mill boilers and report the sulfur content (percent by weight) to the Bureau of Air Regulation and Compliance Authorities. These requirements shall become part of any subsequent air construction and operation permits for the sugar mill boilers.
- g. For each calendar quarter, the permittee shall submit quarterly reports to the Department's Bureau of Air Regulation and the Compliance Authorities that summarize: the work performed on each cogeneration boiler, control equipment, fuel feed system and associated equipment; a revised schedule to restart the cogeneration boilers including maintenance, equipment purchases, and performance testing; progress related to installation of the oxygen process monitors; the quantity and sulfur content of fuel oil purchased for the sugar mill boilers; the status of the fuel and steam interconnections between the cogeneration plant and the sugar mill; the steam production rates and hours of operation for each cogeneration boiler and each sugar mill boiler; the total hours of simultaneous operation; and the status of the FPL lawsuit. The reports are due within 30 days following each calendar quarter.

{Permitting Note: Specific Condition No. 17 is a complete revision. See the "Revision Summary" for the previous version of this text.}

18. For the biomass, ~~coal~~, fly ash, and mercury control system reactant handling facilities:

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- a. All conveyors and conveyor transfer points shall be enclosed to preclude PM emissions (except those directly associated with the stacker/reclaimers, for which enclosure is operationally infeasible).
- ~~b. Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion. Sod, wetting agents, synthetic or other appropriate materials shall be used to cover those parts of the inactive coal pile that are prone to wind or water erosion.~~
- ~~be. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, unenclosed transfer points, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20 percent opacity.~~
- ~~cd. 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. Particulate matter emissions from each of the three silos shall not exceed a visible emission limit of 5 percent opacity. A visible emission test is to be performed annually on each silo.~~

19. Visible emissions from any cogeneration boiler shall not exceed 20 percent opacity, 6-minute average, except up to 27 percent opacity is allowed for 6 minutes in any 1-hour period. Based on a maximum heat input to each boiler of 760 MMBtu/hr for biomass fuels ~~or, 600 MMBtu/hr for No. 2 fuel oil, and 530 MMBtu/hr for coal~~, stack emissions shall not exceed any limit shown in the following table:

(Revised Emissions Table)	EMISSION LIMIT (per boiler) ^b						Total 2 Boilers (TPY)
	Bagasse		Wood Waste		No. 2 Oil ^c		
Pollutant	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)	
Particulate (TSP) 3-hour test average	0.03	22.8	0.03	22.8	0.03	18.0	123.1
Particulate (PM10) 3-hour test average	0.03	22.8	0.03	22.8	0.03	18.0	123.1
Sulfur Dioxide 24-hour average	0.10	76.0	0.10	76.0	0.05	30.0	339.0 ^f
30-day rolling average ^a	0.02	NA	0.05	NA	0.05	30.0	205.2 ^d
Nitrogen Oxides 30-day rolling average ^a	0.14	103.0	0.14	103.0	0.14	84.0	577.0 574.6
Carbon Monoxide 24-hour average	0.35	266.0	0.35	266.0	0.35	210.0	1436.4
Volatile Organic Compounds 3-hour test average	0.06	45.6	0.04	30.4	0.03	18.0	219.2 219.2 ^d
Lead 3-hour test average	2.7 x 10 ⁻⁰⁶	0.002	1.6 x 10 ⁻⁰⁴	0.120	8.9 x 10 ⁻⁰⁷	0.001	0.27 ⁺ 0.27 ^d
Mercury 3-hour test average	3.5 x 10 ⁻⁰⁶	0.003	4.0 x 10 ⁻⁰⁶	0.003	2.4 x 10 ⁻⁰⁶	0.001	0.0168 ⁺ 0.0164 ^d

- a. Compliance based on 30-day rolling average, per 40 CFR 60, Subpart Da.
- ~~b. Emission limit for bagasse. Subject to revision after testing pursuant to Specific Conditions Nos. 23 and 24.~~
- ~~c. Emission limit for woodwaste. Subject to revision after testing pursuant to Specific Conditions Nos. 23 and 24.~~
- ~~bd. The emission limit shall be prorated when more than one type of fuel is burned in a boiler.~~
- ~~ce. Limit heat input from No. 2 fuel. Fossil fuel firing limited to less than 25% of total heat input on a calendar quarter basis and coal to 14,883 tons during any 12 month period. Combined heat input of coal and oil shall be less than 25% of the total heat input on a calendar quarter basis.~~

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

df Compliance based on a 12-month rolling ~~average total from records of continuous monitoring, annual emissions testing, fuel sampling and analyses, fuel consumption, heat input, etc.~~

The permittee shall comply with the excess emissions rule contained in Rule 62-~~296.210.700~~, F.A.C. In addition, the permittee is allowed excess emissions from the cogeneration boilers during startup conditions, provided such excess emissions do not exceed a duration of four hours, and such emissions in excess of two hours do not exceed six (6) times per year.

{Permitting Note: The table of emissions standards for Specific Condition No. 19 is a complete revision. See the "Revision Summary" for the previous version of this text.}

COMPLIANCE REQUIREMENTS

20. Stack Testing

- a. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after restarting the cogeneration plant initial startup, the permittee shall conduct new emission compliance tests for all air pollutants listed in Specific Condition No. 19 (including visible emissions from the activated carbon storage silos). Tests shall be conducted during normal operations (i.e., within 10 percent of the permitted heat input). The permittee shall furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The emission compliance tests will be conducted in accordance with the provisions of 40 CFR 60.46a.
- b. Compliance with emission limitations for each fuel stated in Specific Condition Nos. 18 and 19 above shall be demonstrated using the following EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), continuous emissions monitoring data, or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule ~~1762-297.620~~. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.

<u>EPA Method*</u>	<u>For Determination of:</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 or 3A	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
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 concentration and mass emissions.
201 or 201A	PM ₁₀ emissions.
6, 6C or 19	Sulfur dioxide emissions from stationary sources.
7 or 7E	Nitrogen oxide emissions from stationary sources.
8 (modified)	Sulfuric acid mist.**
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing. - At least one truck unloading into the mercury reactant storage silo (from start to finish).
10	Carbon monoxide emissions from stationary sources.
12	Determination of inorganic lead from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds emissions.

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

df Compliance based on a 12-month rolling ~~average total from records of continuous monitoring, annual emissions testing, fuel sampling and analyses, fuel consumption, heat input, etc.~~

The permittee shall comply with the excess emissions rule contained in Rule 62-~~296-210.700~~, F.A.C. In addition, the permittee is allowed excess emissions from the cogeneration boilers during startup conditions, provided such excess emissions do not exceed a duration of four hours, and such emissions in excess of two hours do not exceed six (6) times per year.

{Permitting Note: The table of emissions standards for Specific Condition No. 19 is a complete revision. See the "Revision Summary" for the previous version of this text.}

COMPLIANCE REQUIREMENTS

20. Stack Testing

- a. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after restarting the cogeneration plant ~~initial startup~~, the permittee shall conduct new emission compliance tests for all air pollutants listed in Specific Condition No. 19 (including visible emissions from the activated carbon storage silos). Tests shall be conducted during normal operations (i.e., within 10 percent of the permitted heat input). The permittee shall furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The emission compliance tests will be conducted in accordance with the provisions of 40 CFR 60.46a.
- b. Compliance with emission limitations for each fuel stated in Specific Condition Nos. 18 and 19 above shall be demonstrated using the following EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), continuous emissions monitoring data, or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule ~~4762-297.620~~. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.

<u>EPA Method*</u>	<u>For Determination of:</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 or 3A	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
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 concentration and mass emissions.
201 or 201A	PM ₁₀ emissions.
6, 6C or 19	Sulfur dioxide emissions from stationary sources.
7 or 7E	Nitrogen oxide emissions from stationary sources.
8 (modified)	Sulfuric acid mist.**
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing. - At least one truck unloading into the mercury reactant storage silo (from start to finish).
10	Carbon monoxide emissions from stationary sources.
12	Determination of inorganic lead from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds emissions.

**REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

101A	Determination of particulate and gaseous mercury emissions.
104	Determination of beryllium emissions from stationary sources.
108	Determination of particulate and gaseous arsenic emissions.
EMTIC Test Method CTM-012.WPF	Chromium and copper emissions.

- * Other approved EPA test methods may be substituted for listed methods upon approval by ~~unless the Department has adopted a specific test method for the air pollutant.~~

~~** Test for sulfuric acid mist only required when coal or tire derived fuel blends are burned at the facility.~~

~~{Permitting Note: Test methods 8, 13A, 13B, and 104 were removed because coal is no longer an authorized fuel.}~~

21. ~~In accordance with Rule 62-297.310(2), F.A.C., unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation 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 minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load 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. Emission compliance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.~~
22. The permittee shall provide 30 days notice of the performance tests conducted after restart and 15 ~~working~~ days for subsequent stack tests in order to afford the Department the opportunity to have an observer present.
23. Stack tests for particulates, NO_x, SO₂, ~~sulfuric acid mist~~, CO, VOC, lead, mercury, ~~beryllium, fluorides, arsenic, chromium, copper, and visible emissions~~ shall be performed once every six months during the first two years after restarting the cogeneration plant of facility operation in accordance with Specific Conditions Nos. 20, 21, and 22 above. If the test results for the first two years of operation after restarting the cogeneration plant indicate the facility is operating in compliance with the terms of approval and of applicable permits and regulations, the tests will thereafter occur according to the following schedule:
 - Annually for particulates, sulfur dioxide*, ~~sulfuric acid mist~~, NO_x, CO, VOC, mercury, arsenic, chromium, copper and visible emissions.
 - Within the 12-month period prior to permit renewal for ~~Once every five years (at permit renewal time) for SO₂, sulfuric acid mist, lead emissions, beryllium, and fluorides.~~

~~* Test required only during years coal is burned in the boilers. {Permitting Note: Test requirements for sulfuric acid mist, beryllium, and fluorides were removed because coal is no longer an authorized fuel.}~~

After initial performance tests that demonstrate compliance with the emission standards for CO, NO_x, and SO₂, data collected from the continuous emissions monitoring systems may be used in lieu of stack test data for these pollutants.

24. ~~After conducting the initial stack tests required under Specific Condition No. 23 above, At least 60 days before restarting the cogeneration plant, a revised Fuel mManagement pPlan shall be submitted to the Department's Bureau of Air Regulation and the Compliance Authorities Palm Beach County within 90 days after issuance of this modification specifying the fuel types and fuel quantities to be burned in the~~

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

facility in order to not exceed the facility annual mercury ~~and lead~~ ~~beryllium, and fluorides~~ emission limits specified in Condition 19 above and the previous actual mercury emissions from the facility. The plan shall include mercury emission factors based on stack testing, and may include revised mercury emission factors and baseline emission estimates for the existing Osceola Farms sugar mill. The Title V operation permit will be issued or revised with limits for bagasse, wood waste, and oil firing that restrict the maximum annual mercury and lead emissions to less than the annual permit allowables.

25. Stack monitoring, fuel usage, and fuel analysis data and the status of the interconnection between the sugar mill and the cogeneration facility shall be reported to the ~~Compliance Authorities Department's South and Southeast District Offices and to the Palm Beach County Health Unit~~ on a quarterly basis commencing with the restart of commercial operation in accordance with 40 CFR, Part 60, Sections 60.7 and 60.49a, and in accordance with Section 62-297.520500, F.A.C. The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart Ka, for the No. 2 fuel oil storage tank.
26. The permittee, for good cause, may request that this construction permit be extended except as limited by Specific Condition No. 17 of this permit. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 62-4.080090).
27. A timely application for a Title V permit to operate shall be submitted to the Department's South District Office ~~Palm Beach County~~ air program administrator by the date specified in chapter 62-213, F.A.C.

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION IV. APPENDIX GC - GENERAL CONDITIONS

(Permitting Note: The General Conditions appeared on pages 2 through 5 in the most recent version of the PSD permit.)

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 or 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

REVISED AIR CONSTRUCTION PERMIT (PSD-FL-197G) – REVISED DRAFT
SECTION IV. APPENDIX GC - GENERAL CONDITIONS

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 modification incorporates previous determinations for:
 - (X) Determination of Best Available Control Technology (BACT)
 - (X) Determination of Prevention of Significant Deterioration (PSD)
 - (X) Compliance with New Source Performance Standards (NSPS)
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:
 - The date, exact place, and time of sampling or measurements;
 - The person responsible for performing the sampling or measurements;
 - The dates analyses were performed;
 - The person responsible for performing the analyses;
 - The analytical techniques or methods used; and
 - 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. - REVISED DRAFT
APPENDIX ES - EMISSIONS SUMMARY**

Summary of Equivalent Annual Emissions

Pollutant	Equivalent Calculated Annual Emissions, Two Boilers ^a						Maximum ^b Annual TPY
	Bagasse		Wood		Oil Plus Biomass		
	lb/MMBtu	TPY	lb/MMBtu	TPY	lb/MMBtu	TPY	
Particulate (TSP) 3-hour test average	0.03	123.12	0.03	123.12	0.03	123.12	123.12
Particulate (PM10) 3-hour test average	0.03	123.12	0.03	123.12	0.03	123.12	123.12
Sulfur Dioxide 30-day rolling average	0.02	82.08	0.05	205.20	0.05	205.20	205.2
Nitrogen Oxides 30-day rolling average	0.14	574.56	0.14	574.56	0.14	574.56	574.6
Carbon Monoxide 24-hour average	0.35	1436.4	0.35	1436.4	0.35	1436.40	1436.4
Volatile Organic Compounds 3-hour test average	0.06	246.24	0.04	164.16	0.03	215.46	219.2 ^c
Lead 3-hour test average	2.7 x 10 ⁻⁰⁶	0.0111	1.6 x 10 ⁻⁰⁴	0.6566	8.9 x 10 ⁻⁰⁷	0.4934	0.27 ^c
Mercury 3-hour test average	3.5 x 10 ⁻⁰⁶	0.0144	4.0 x 10 ⁻⁰⁶	0.0164	2.4 x 10 ⁻⁰⁶	0.0132	0.0164 ^c

a Annual emissions based on the following heat input limits in accordance with Specific Conditions Nos. 11 and 15:

Biomass Firing:

100% Bagasse Firing: 8.208 E⁺⁰⁶

100% Wood Firing: 8.208 E⁺⁰⁶

Oil firing:

25% oil firing: 2.052 E⁺⁰⁶

75% biomass firing: 6.156 E⁺⁰⁶

b Except as noted below, maximum annual emissions are equivalent to the worst case emissions.

c The permit limits emissions of VOC, lead, and mercury to these annual rates. Therefore the permittee must demonstrate compliance with these lower annual limits.

SECTION IV. - REVISED DRAFT
APPENDIX XS - CEMS EXCESS EMISSIONS REPORT

**FIGURE 1 – QUARTERLY PERFORMANCE SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEMS**

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (Circle One): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer and Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ^a: _____

Emission data summary ^a		CMS performance summary ^a	
1. Duration of Excess Emissions In Reporting Period Due To:		1. CMS downtime in reporting period due to:	
a. Startup/Shutdown		a. Monitor Equipment Malfunctions	
b. Control Equipment Problems		b. Non-Monitor Equipment Malfunctions	
c. Process Problems		c. Quality Assurance Calibration	
d. Other Known Causes		d. Other Known Causes	
e. Unknown Causes		e. Unknown Causes	
2. Total Duration of Excess Emissions		2. Total CMS Downtime	
3. [Total Duration of Excess Emissions] x (100%) [Total Source Operating Time] ^b		3. [Total CMS Downtime] x (100%) [Total source operating time]	

^a For opacity, record all times in minutes. For gases, record all times in hours.

^b For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name

Title

Signature

Date

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION (REVISED DRAFT)

Osceola Power L.P. Cogeneration Plant
PSD Permit No. PSD-FL-197G
DEP Project No. 0990331-008-AC

1.0 APPLICATION INFORMATION

1.1 Applicant

Gus Cepero, Authorized Representative
Osceola Power Limited Partnership
P.O. Box 606
Pahokee, FL 33476

(Note: Mr. Cepero is the Vice President of Sol Energy, the managing General Partner of Osceola Power Limited Partnership, which operates the Osceola Cogeneration Plant.)

1.2 Processing Schedule

09/28/99	Department received a request to modify the PSD permit.
10/18/99	Department received comments from Palm Beach County Health Department.
10/21/99	Department requested additional information.
01/19/00	Department received partial additional information requested.
01/21/00	Department met with representatives of OsPLP to discuss remaining issues.
01/31/00	Department mailed a letter that summarized the meeting and identified remaining items of incompleteness.
03/06/00	Department received partial additional information requested (email identifying specific requests by OsPLP).
03/02/00	Department received letter from Gus Cepero on behalf of OsPLP partially responding to Department's 01/31/00 letter.
03/23/00	Department received remaining additional information from Golder Associates; application deemed complete.
05/18/00	Department issued initial Draft Permit.
05/25/00	Department met with representatives of Osceola Power L.P. to discuss remaining issues.
05/30/00	Applicant requested an initial extension of time to file for an administrative hearing.
06/26/00	Department 's OGC granted request for an extension of time to July 18, 2000.
07/xx/00	Applicant requested additional extensions of time to file for an administrative hearing.
08/25/00	Department met with representatives of Osceola Power L.P. to discuss remaining issues.
09/07/00	Applicant withdrew all requests for extensions to file for an administrative hearing.

2.0 FACILITY DESCRIPTION

For more than thirty years, the Osceola Farms Company has owned and operated a sugar mill operation just east of Pahokee in Palm Beach County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by truck. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze the juice from the cane. The cane juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill. The primary air pollution sources for the sugar mill consist of five bagasse-fired boilers, which incorporate wet scrubbers for particulate matter control.

In September of 1992, the Department received an application for an air permit from Sol-Energy, Inc. to construct a cogeneration plant next to the Osceola Farms' sugar mill. As stated in the application, the proposal was to, "... replace the five existing bagasse/oil-fired boilers with a cogeneration system consisting of two new spreader stoker combustion units." The two new biomass-fired boilers would provide enough steam energy for the needs of the sugar mill as well as generate up to 60 MW of electricity to be sold to the Florida Power & Light Company (FPL). "Biomass" would consist of bagasse and wood materials such as clean dry wood, yard trimmings, land clearing debris, and other vegetative matter. Approximately two-thirds of the annual heat input would be provided by bagasse with the remaining third coming from the wood materials. Low sulfur distillate oil would be used as a startup and supplemental fuel. Coal was originally included as an emergency fuel in order to secure financial backing for the project. Sol-Energy stated that it did not intend to burn coal at this facility. No coal handling facilities were ever constructed or installed. Sol-Energy and Osceola Farms Company are adjacent plants under common control. Therefore, the Department determined that the two plants are a single facility for purposes of the PSD air construction and Title V air operation permitting programs. Sol-Energy is now the managing general partner of Osceola Power Limited Partnership (OsPLP).

The cogeneration boilers will minimize CO and VOC emissions by high temperature, thermally efficient combustion. Urea injection is used to reduce NOx emissions through selective non-catalytic reduction (SNCR). An electrostatic precipitator controls particulate matter emissions. Activated carbon injection is used to reduce mercury and other metal vapor emissions. Although the project was permitted as a new plant, the applicant netted out of New Source Review (BACT and LAER) for several pollutants by using emissions from the existing sugar mill boilers as "decreases" due to shutdown.

3.0 APPLICANT'S REQUEST

Osceola Power L.P. (OsPLP) has requested a fourth revision to specific condition no. 17 in order to extend operation of the sugar mill boilers as standby units for the cogeneration boilers until April 1, 2002 with permanent shutdown no later than April 1, 2003. The request includes the capability of operating the existing sugar mill boilers simultaneously with the cogeneration boilers. OsPLP filed for bankruptcy related to a dispute with FPL over matters involving commercial startup, capacity, availability, payments, etc. With regard to these issues, FPL filed a lawsuit scheduled for trial in September of this year. OsPLP asserts that the requested extension and simultaneous operation of the sugar mill boilers with the cogeneration boilers is necessary due to the uncertainty caused by the FPL litigation and the bankruptcy case.

4.0 PERMITTING HISTORY - PERMANENT SHUTDOWN AND SIMULTANEOUS OPERATIONS

As summarized in Attachment A, the Department reviewed the permitting history of the cogeneration plant. An important item for consideration is the applicant's original intent described in the following excerpt from page 2-5 of the air construction permit application.

"... The existing boilers will be shut down upon commercial operation of the proposed cogeneration facility. During the first three years of cogeneration facility operation, the existing boilers may be operated only at times when the two boilers of the new cogeneration facility are shut down for repair or maintenance. After this time, the existing boilers will be permanently disabled and made incapable of operation."

From these statements, it is clear that the applicant fully intended to permanently retire the existing sugar mill boilers. In fact, the applicant only desired the capability to operate the existing sugar mill boilers as emergency standby units when both cogeneration boilers were shut down for repair or maintenance during the first three years of commercial operation. The intent to permanently shutdown the existing sugar mill boilers is also evidenced in the applicant's PSD applicability analysis that shows a negative net emissions increase for the project. The following table summarizes the baseline emissions, project emissions, significant net emissions increases and PSD applicability presented by the applicant.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION (REVISED DRAFT)

Regulated Pollutant	Baseline ^a Emissions TPY	New Project ^b Emissions TPY	Net Emissions Change ^c TPY	Significant Emissions Rate, Table 62-212.400-2 TPY	PSD Applies?
PM	357.7	109.3	-248.4	25	No
PM ₁₀	321.9	106.7	-215.2	15	No
SO ₂	178.5	1071.5	+893.0	40	Yes
NO _x	437.8	436.5	-1.3	40	No
CO	5992.3	1225.0	-4767.3	100	No
VOC	208.6	210.0	+1.4	40	No
Pb	0.16	0.11	-0.05	0.6	No
Hg	0.0137	0.0139	+0.0002	0.1	No
Be	0.00002	0.0049	+0.00488	0.0004	Yes
Fl	0.0079	19.8	+19.8	3	Yes
SAM	5.36	31.1	+25.7	7	Yes

^a - Baseline emissions are based on the actual operation of Osceola Farms Company during 1990 through 1992.

^b - New project emissions were based on the proposed worst-case emissions after control for continuous operation.

^c - The net emissions change was based on the shutdown of Osceola Farms Company's bagasse boilers.

As shown in the above table, only sulfur dioxide, sulfuric acid mist, beryllium, and fluoride were subject to PSD after control by the proposed equipment and considering shutdown of the sugar mill boilers at Osceola Farms sugar mill. These pollutants could not escape PSD primarily due to the applicant's request to fire low sulfur coal. Again, coal handling and storage equipment was never installed. Although Palm Beach County was not in attainment with the ozone standard in 1992, the application contained little discussion of triggering a determination of the Lowest Achievable Emissions Rate (LAER) for NO_x and VOC. In accordance with the PSD regulations, the Department issued (and the applicant accepted) an initial air construction permit that made shutdown of the existing sugar mill boilers a federally enforceable requirement. Although constructed and tested in 1996, operations of the cogeneration plant were shutdown in 1997 due to contractual problems with FPL regarding the sale of electrical power. The following discussion summarizes the permitting history related to simultaneous operation and permanent shutdown of the sugar mill boilers from the initial air construction permit to the current request.

Air Permit No. AC50-219795 (PSD-FL-197) Issued September 27, 1993: This was the original construction permit for a 60 MW cogeneration plant with the following Specific Condition No. 17, which restricted simultaneous operation.

- "17. During the first three years of commercial cogeneration facility operation, the existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. A050-203679, 165813, 203680, 165626, and 165814, respectively) may be retained for standby operation provided their operating permits are valid.

During the period from initial firing to commercial operation, both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 495,000 lb/hr steam, (24-hour average) is generated in the cogeneration boilers, steam in excess of 495,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boiler's steam production reduced by an equivalent amount. This period shall not exceed a total duration of 12 months. During this 12-month period, simultaneous operation of the existing boilers and the cogeneration boilers shall not occur on more than a total of 90 calendar days. After the first year of cogeneration facility operation, the existing boilers may be operated only when both new cogeneration boilers are shutdown. During operation, the existing boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing boilers shall be shutdown and rendered incapable of operation within three (3) years of commercial startup of the cogeneration facility, but no later than January 1, 1999."

{Comments: As the cogeneration boilers were brought online, there would be some simultaneous operation limited to 90 days during a 12-month phase-in period. Afterwards, the sugar mill boilers

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could only be used as emergency backup units when both cogeneration boilers were shutdown. Note that the sugar mill boilers were required to be permanently shutdown within three years of commercial startup, but no later than January 1, 1999.}

Air Permit No. 0990331-001-AC (AC50-269980 and PSD-FL-197A) Issued on October 16, 1995: The permittee requested a major revision to increase the electrical generating capacity to 74 MW. The following changes were made to Specific Condition No. 17.

- "17. During the first three years of commercial cogeneration facility operation, the existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. AC 50-203679, 165813, 203680, 165626, and 165814, respectively) may be retained for standby operation provided their operating permits are valid.

During the period from initial firing to commercial operation, both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam, (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boiler's steam production reduced by an equivalent amount. This period shall not exceed a total duration of 12 months. During this 12-month period, simultaneous operation of the existing boilers and the cogeneration boilers shall not occur on more than a total of 120 calendar days. After the first year of cogeneration facility operation, the existing boilers may be operated only when both new cogeneration boilers are shutdown. During operation, the existing boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing boilers shall be shutdown and rendered incapable of operation within three (3) years of commercial startup of the cogeneration facility, but no later than January 1, 1999."

{Comments: The modification revised the steam generation rates due to the requested increase in electrical production. Simultaneous operation was increased from 90 to 120 calendar days during the initial 12-month phase-in period. Note that the modification did not change the requirement to permanently shutdown the sugar mill boilers within three years of commercial startup, but no later than January 1, 1999.}

Air Permit No. 0990331-002-AC (PSD-FL-197A) Issued on June 14, 1996: In 1996, the cogeneration boilers were started up, but experienced various difficulties with the fuel handling and steam interconnections with the sugar mill, which delayed the ability to provide reliable steam to the mill. The permittee requested a revision that would allow additional simultaneous operation. Specific Condition No. 17 was revised to read:

- "17. During the first three years of commercial cogeneration facility operation, the existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. AO 50-203679, 165813, 203680, 165626, and 165814, respectively), may be retained for standby operation provided their operating permits are valid.

During the period from initial firing through April 1, 1997, both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boiler's steam production reduced by an equivalent amount. After April 1, 1997, the existing boilers may be operated only when both new cogeneration boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing sugar mill boilers shall be shutdown and rendered incapable of operation within three (3) years of commercial startup of the cogeneration facility, but no later than January 1, 1999."

{Comments: The modification replaced "commercial operation" and the limit of 120 days of simultaneous operation with a deadline of April 1, 1997. Operation after this date was allowed only if both cogeneration boilers were shutdown or "in the process of immediately shutting down". Note that

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the modification did not change the requirement to permanently shutdown the sugar mill boilers within three years of commercial startup, but no later than January 1, 1999.}

Air Permit No. 0990331-005-AC (PSD-FL-197D) Issued On May 5, 1997: In December of 1996, emissions performance tests were conducted on the cogeneration boilers. However, due to the continuing difficulties mentioned previously, the permittee requested additional time in order to perfect the steam interconnection with the sugar mill. The following changes were made to Specific Condition No. 17.

- "17. During the first three years of commercial cogeneration facility operation, the existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. AO 50-269980, 203679, 165813, 203680, 165626, and 165814, respectively), may be retained for standby operation provided their operating permits are valid.

During the period from initial firing through April 1, 1998 both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boiler's steam production reduced by an equivalent amount. After April 1, 1998 the cogeneration facility's boilers may be operated only when the sugar mill boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing sugar mill boilers shall be shutdown and rendered incapable of operation within three (3) years of commercial startup of the cogeneration facility, but no later than January 1, 1999."

{Comments: The modification replaced the deadline of April 1, 1997 with a new deadline of April 1, 1998. Note that the modification now reads that the cogeneration boilers may be operated only when the sugar mill boilers are shutdown or in the process of immediately shutting down – which is reversed from previous versions. The modification did not change the requirement to permanently shutdown the sugar mill boilers within three years of commercial startup, but no later than January 1, 1999.}

Air Permit No. 0990331-007-AC (PSD-FL-197F) Issued on June 15, 1998: The cogeneration boilers continued to experience various difficulties with the fuel handling and steam interconnections with the sugar mill. In addition, Florida Power & Light (FPL) contested the commercial startup and availability of the cogeneration boilers with respect to contractual obligations. FPL withheld and/or reduced payments to OsPLP. These actions caused OsPLP to file for bankruptcy. OsPLP maintained that additional time was still needed to establish reliable interconnections with the sugar mill. Specific Condition No. 17 was revised to:

- "17. The existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. AO 50-269980, 203679, 165813, 203680, 165626, and 165814, respectively), may be retained for standby operation until the interconnections (bagasse fuel and steam systems) between the cogeneration facility and the sugar mill are commercially and operationally reliable, but no later than April 1, 2000, provided their operating permits are valid.

During the period from initial firing through April 1, 2000 both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boilers' steam production reduced by an equivalent amount. After April 1, 2000, the cogeneration facility's boilers may be operated only when the sugar mill's boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing sugar mill boilers shall be shutdown and rendered incapable of operation when the interconnected operations are commercially and operationally reliable, but no later than April 1, 2001.

25. Stack monitoring, fuel usage, fuel analysis data, and the status of the interconnection between the sugar mill and the cogeneration facility shall be reported to the Department's South and Southeast District

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Offices and to the Palm Beach County Health Unit on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Sections 60.7 and 60.49a, and in accordance with Section 17-297.500, F.A.C.”

{Comments: The revision authorized operation of the sugar mill boilers, including simultaneous operation, until reliable bagasse and steam interconnections are established with the sugar mill but no later than April 1, 2000. After this date, the cogeneration boilers could only be operated when the sugar mill boilers were shutdown or in the process of immediately shutting down. The date to permanently shutdown the sugar mill boilers was changed from January 1, 1999 to April 1, 2001. A quarterly update on the status of interconnections between the cogeneration plant and sugar mill was added.}

5.0 DEPARTMENT'S REVIEW

Osceola Power L.P. responded to several questions raised by the Department regarding this request. Gus Cepero, the authorized representative of OsPLP, submitted a response on March 6, 2000. The following summarizes important issues raised by Mr. Cepero and the Department's comments.

1. Mr. Cepero reminded the Department that “.. the sugar mill boilers have been successfully operated for many years in compliance with all of the state and federal standards...”. He clarified that the past extensions were not due to physical problems with the cogeneration boilers, but to “... perfect the interconnected operation of the two facilities.” Further, this request is necessary as a result of the bankruptcy case, the FPL lawsuit, and the “... uncertainties created by those two legal proceedings.”

Comments: These comments suggest that there are no remaining problems with the interconnected operations of the cogeneration plant with the sugar mill. Furthermore, shutdown of the cogeneration plant was a business decision based on the costs of operating the cogeneration boilers compared to the sugar mill boilers and the uncertainty associated with the pending litigation.

2. Mr. Cepero continues by stating the following:

“OPLP does not wish to see, and currently does not expect, a permanent shutdown of the cogeneration boilers. However, OPLP cannot determine whether it will be economically feasible for the cogeneration facility to resume commercial operations until the FPL litigation and bankruptcy proceeding are resolved. Further, I am not aware of any legal requirement that would compel Osceola Farms to obtain ‘substantially new permits’ in the unlikely event that Osceola Farms must continue with its use of the sugar mill boilers, in lieu of receiving process steam from the cogeneration facility.”

Comments: The PSD permit links the operation of the sugar mill boilers to the cogeneration plant. The link was established by Osceola Power L.P.'s initial and subsequent requests over the last seven years to net out of several BACT determinations for the new cogeneration plant. If the cogeneration plant is fully functional, the Department cannot allow continued operation of both the cogeneration boilers and the sugar mill boilers. The sugar mill boilers must be permanently shutdown to secure the requested and required emissions reductions. Otherwise, OsPLP must surrender the PSD permit for the cogeneration boilers and relinquish the ability to restart and operate the cogeneration plant. If the PSD permit for the cogeneration plant is surrendered, the Department will give no consideration to any existing equipment at the cogeneration plant in future permitting decisions.

The following summarizes the response received on March 23, 2000 from Golder Associates on behalf of OsPLP and Department's corresponding comments.

1. OsPLP states that it is not possible to provide a firm date for restarting the cogeneration boilers and permanent shutdown of the sugar mill boilers because of the bankruptcy proceeding and the FPL lawsuit. OsPLP estimates that the earliest possible date for restart would be later this year.

Comment: The Department is concerned that the applicant has not yet restarted the cogeneration plant and replaced the sugar mill boilers, as required by conditions of the PSD permit.

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2. The cogeneration boilers began initial startup in 1996 and conducted emissions performance tests in December of 1996. The test reports appear to indicate compliance with the permit conditions, as modified. The cogeneration boilers were shutdown in 1997 for a variety of reasons.

Comment: Again, the Department expresses concern that the applicant has not yet restarted the cogeneration plant and replaced the sugar mill boilers, as required by conditions of the PSD permit.

3. OsPLP maintains that limited operation of the cogeneration plant did not provide adequate time to finalize the bagasse and steam interconnections with the sugar mill. OsPLP requests an additional 120 days (equivalent hours) of "simultaneous operation" during the first 12 months after restart of the cogeneration boilers.

Comments: The Department notes that continued problems with the fuel feed systems, control equipment, and steam interconnection may have delayed finalizing the steam interconnection. However, the Department observes no effort to restart the cogeneration plant.

4. OsPLP notes that the Osceola Farms' sugar mill boilers have remained in compliance with all permit requirements based on annual tests.

Comments: The Department is not aware of any stack tests performed that demonstrate compliance with the NOx and VOC emissions standards specified Rule 62-296.570, F.A.C.

5. OsPLP did not provide an Air Quality Analysis specific to the simultaneous operation of the sugar mill boilers and the cogeneration boilers. The applicant did provide two justifications previously submitted in 1993 and 1995.

Comments: The Department notes that the original permits required shutdown of the sugar mill boilers by January 1, 1999. Although this has previously been extended, the Department believes that a new demonstration is necessary to support this new request. Prior to restart of the cogeneration boilers, the Department will require a new Air Quality Analysis to verify that simultaneous operation of the cogeneration boilers with the sugar mill boilers (in conjunction with all major sources at this time and in this area), do not cause or contribute to violations of the AAQS or PSD increments. OsPLP will be required to abide by any special constraints proposed with the revised Air Quality Analysis.

6. OsPLP states that the cogeneration boilers have been placed in "cold shutdown" for a prolonged period, as allowed by Rule 62-210.300(2), F.A.C. OsPLP also mentions that it is only necessary to commence construction to meet the requirements of 40 CFR 52.21(r). The applicant explains that this is to ensure that any BACT determinations remain valid and to prevent an applicant from holding onto a permit indefinitely before constructing when alternate control technologies may have advanced significantly. The applicant asserts that BACT determinations were only required for SO₂, SAM, Be, and FI emissions due to the firing of coal as an emergency backup fuel. Because the PSD permit allowed only limited coal firing, the applicant believes that the original BACT determination "appears to be adequate by today's standards".

Comments: A stated primary purpose in obtaining the PSD permit was to replace the sugar mill boilers with the cogeneration boilers. OsPLP appears to be stating that the cogeneration boilers have been constructed, tested, and operated in accordance with the conditions of the PSD permit, but that OsPLP is now unwilling to permanently shutdown the sugar mill boilers, which is also required by the PSD permit. The Department does not believe the PSD permit allows OsPLP to place the cogeneration boilers in cold reserve and to continue to operate the "standby" sugar mill boilers as the primary units. Again, the sugar mill boilers should be shutdown or OsPLP should surrender the PSD permit for the cogeneration plant.

The Department clarifies that BACT was only triggered for SO₂, SAM, Be, and FI emissions due to the firing of coal as an emergency backup fuel *and because emissions decreases would result from the required shutdown of the sugar mill boilers*. It should be noted that the 1997 modification (Project No. 0990331-006-AC) required a BACT determination for NOx in order to increase the emissions standard from 0.12 to 0.14 lb/mmBTU, which is consistent with the initial determination made for Okeelanta Power L.P.

permitted at nearly the same time. It is also interesting to note that OsPLP originally requested a lower NOx limit than did Okeelanta Power L.P. specifically to avoid a BACT determination for NOx.

The Department concurs that the PSD program requires construction to commence within a reasonable time for the reasons given. Because coal crushing, handling, storage, and related facilities have not been constructed during the past seven years, the Department will remove the authorization to fire coal, while acknowledging that the cogeneration boilers were designed to fire low sulfur coal. Should OsPLP ever request the installation of coal handling facilities and coal firing in the future, new air construction and operation permits will be required. Depending on the request, the new air construction permits will likely require at least a new BACT determination for SO₂ for both the coal handling facilities and the cogeneration boilers. BACT determinations may also be required for beryllium and fluorides as well as other pollutants.

7. OsPLP maintains that the sugar mill boilers have continued to operate normally since the cogeneration boilers were shutdown in 1997. There have been no apparent increases in emission factors and the steam production rates have remained fairly constant. OsPLP offers the following additional control measures as part of this request:

- Install and operate flue gas oxygen monitors with alarms for each sugar mill boiler to minimize emissions of CO, NOx, and VOC.
- Purchase only fuel oil containing no more than 1.0% sulfur by weight for use in the sugar mill boilers.

Comment: The Department notes that the most recent BACT determinations for modified, existing sugar mill boilers also requires a flue gas CO process monitor, the use of fuel oil containing no more than 0.7% sulfur by weight, and requirement to meet standards, monitoring, and testing requirements for emissions of CO, NOx, PM, SO₂, and VOC.

The Department also considered the following items in making its determination.

1. Although the cogeneration plant was constructed and tested in 1996, operations were shutdown in 1997. In the original PSD permit, OsPLP specifically requested shutdown of the sugar mill boilers so that the emissions decreases could be used to net out of determinations of Best Available Control Technology for several pollutants.
2. Florida's major source inventory for this area does not yet include Osceola Power L.P.'s cogeneration boilers, but has retained Osceola Farms' sugar mill boilers. In other words, current projects being modeled and reviewed for PSD major source impacts do not yet consider emissions from the cogeneration units, but do include emissions from the sugar mill boilers. *{Note: Recent applications include U.S. Sugar Clewiston Mill Boiler No. 4 modification (Project No. 0510003-010-AC) and Atlantic Sugar Association Boiler No. 5 modification (Project No. 0990016-004-AC).}*
3. According to the Department's staff meteorologist, a full PSD modeling analysis was not performed for simultaneous operations in either 1993 or 1995. In both cases, a limited analysis was presented to support the scenario of operating the cogeneration boilers simultaneously with some of the existing sugar mill boilers for up to 90 days (revised to 120 days in Modification No. PSD-FL-197A) during the first year of commercial operation. The Department will require a new Air Quality Analysis to ensure that simultaneous operation of the sugar mill and cogeneration boilers do not adversely impact the AAQS or PSD increments as this area exists today.
4. On October 15, 1999, the Palm Beach County Health Department provided comments that emissions from these plants have exceeded the baseline emissions presented in the initial PSD application. The local air program recommends daily and annual emissions caps similar to the baselines. Palm Beach County requests, at a minimum, that the cogeneration boilers be used to the maximum extent possible to meet the steam requirements of the sugar mill. The Health Department has also performed recent inspections of both plants. Because of the inactivity of the cogeneration boilers, it appears that a substantial amount of maintenance, repair, and refurbishment may be necessary before restarting these boilers.

6.0 CONCLUSION

The Department issued an initial Draft Permit for this project on May 18, 2000. The applicant did not publish a public notice on this draft permit, but requested extensions of time to file for an administrative hearing. The Department and applicant held several meetings to resolve key issues. Based on minor changes to the draft permit, the applicant withdrew the requests for extensions of time to file for an administrative hearing with the understanding that the Department would issue a revised draft permit.

Based on the available information, the Department believes that additional time will be necessary to reestablish the fuel and steam interconnections between the cogeneration plant and sugar mill in order for this project to come to a successful conclusion. Therefore, the Department intends to conditionally approve the request for an extension to operate the sugar mill boilers, as follows:

- Authorize operation of the sugar mill boilers from October 1, 2000 through April 30, 2001. This would provide an additional year to determine whether or not to restart the cogeneration plant. Contingent on the installation of mechanical dust collectors for the cogeneration boilers, operation of the sugar mill boilers would be extended to include the following milling season (October 1, 2001 through April 30, 2002). This would provide an additional year to restart the cogeneration plant and reestablish reliable fuel and steam interconnections with the sugar mill.
- Remove coal-firing conditions from entire permit. Recognizes that the cogeneration boilers were designed to fire coal, but requires appropriate air construction and operation permits prior to firing coal.
- Require a revised Air Quality Analysis for simultaneous operation of the cogeneration and sugar mill boilers. Requires operation in accordance with any constraints imposed by this analysis.
- Allow simultaneous operation of the sugar mill and cogeneration boilers to establish reliable fuel and steam interconnections between the cogeneration plant and the sugar mill. Simultaneous operation is limited to no more than a total of 2880 hours (120 days x 24 hours) to allow for a phase-in period. After 2880 hours of simultaneous operation or reestablishing reliable interconnections, operation of the sugar mill boilers is permitted only if both cogeneration boilers are inoperable due to electrical or mechanical failure.
- No later than August 1, 2002, require **either** permanent shutdown of the sugar mill boilers, **or** surrender of the PSD permit for the cogeneration plant to the Department. A surrender of the PSD permit would relinquish authorization to operate the cogeneration plant. Furthermore, the Department will give no consideration to any existing equipment associated with the cogeneration plant in future permitting decisions. However, surrender of the PSD permit would allow continued operation of the sugar mill boilers in accordance with the Title V operation permit.
- Require installation of a flue gas oxygen monitor with an audible alarm for each sugar mill boiler. Require the purchase of oil containing no more than 1.0% sulfur by weight for use in sugar mill boilers.
- Require submittal of quarterly reports summarizing operational status and progress.
- Require updated process flow diagrams for the cogeneration boilers, fuel handling systems, control equipment, and emissions monitoring equipment.

The revised Draft Permit allows up to an additional two years to operate the sugar mill boilers in order to restart the cogeneration plant to and to reestablish reliable fuel and steam interconnections with the sugar mill. Although it extends the requirement to shutdown the sugar mill boilers, it does not affect any of the impacts addressed by the original Air Quality Analysis upon which the initial PSD permit was based. It does require verification of this analysis for simultaneous operations prior to allowing simultaneous operations. The Department believes this modification maintains the original intent of the initial PSD permit. Jeff Koerner is the permitting engineer responsible for reviewing the application, recommending this determination, and drafting the permit.

ATTACHMENT A – PERMITTING HISTORY

Air Permit No. AC50-219795 (PSD-FL-197) Issued on September 27, 1993: Original air construction permit issued for a biomass cogeneration plant to generate a nominal 60 MW of electrical power.

Air Permit No. AC50-219795 (PSD-FL-197) Amended on April 12, 1994: Original air construction permit amended from a 60 MW to 65 MW cogeneration plant.

Air Permit No. 0990331-001-AC (AC50-269980 and PSD-FL-197A) Issued on October 16, 1995: A completely revised air construction permit was issued to increase in the electrical power production from 65 MW to 74 MW.

Air Permit No. 0990331-002-AC (PSD-FL-197A) Issued on June 14, 1996: OsPLP requested an extension of time for the simultaneous operation of the cogeneration boilers with the sugar mill boilers in order to correct technical problems with the boilers, the biomass feed system, and the steam interconnection. Department revised specific condition no. 17 to extend simultaneous operation beyond the first year of commercial startup of the cogeneration boilers to April 1, 1997. The permit required the sugar mill boilers to be rendered incapable of operation no later than January 1, 1999.

Air Permit No. 0990331-003-AC (PSD-FL-197B) Issued on January 22, 1997: OsPLP requested approval to fire tire derived fuel (TDF) in the biomass boilers. The Department granted approval of a trial burn in to conduct emissions performance testing for supporting information for the request. In May of 1997, the applicant requested an extension of the permit expiration date to conduct the testing. The permit expiration date was extended from July 1, 1997 to April 1, 1998 with a deadline to complete emissions performance testing for TDF by August 31, 1997. OsPLP later requested another extension of the permit expiration date for additional time to conduct emissions performance testing for TDF. On September 5, 1997, the Department extended the permit expiration date from April 1, 1998 to December 1, 1998.

Air Permit No. 0990331-004-AC (PSD-FL-197D) Issued on April 18, 1997: OsPLP requested a revision to the emission standard and testing requirements for sulfuric acid mist. The Department retained the emission standard, but revised the test method to EPA Method 8 (modified).

Air Permit No. 0990331-005-AC (PSD-FL-197D) Issued on May 5, 1997: OsPLP requested an extension of time for the simultaneous operation of the cogeneration boilers with the sugar mill boilers in order to perfect the steam interconnection. Department revised specific condition no. 17 to extend simultaneous operation to April 1, 1998. The permit required the sugar mill boilers to be rendered incapable of operation no later than January 1, 1999.

Air Permit No. 0990331-006-AC (PSD-FL-197E) Issued on October 21, 1997: OsPLP requested a relaxation of the emissions standards for carbon monoxide, lead, mercury, sulfur dioxide, and nitrogen oxides. The Department revised specific condition nos. 15, 16, 19, and 20. Relaxing the NOx standard triggered a BACT determination because the facility had originally requested a lower limit to avoid New Source Review and a determination of the Lowest Achievable Emissions Rate. However, Palm Beach County was now (as of 1996) designated as a maintenance area – in attainment with the ozone standard.

Air Permit No. 0990331-007-AC (PSD-FL-197F) Issued on June 15, 1998: OsPLP requested an extension of time for the simultaneous operation of the cogeneration boilers with the sugar mill boilers in order to perfect the biomass feed system and steam interconnection. The Department revised specific condition no. 17 to extend simultaneous operation to April 1, 2000 and specific condition no. 25 to require status reports on the steam interconnection. The permit required the sugar mill boilers to be rendered incapable of operation no later than April 1, 2001.

Air Permit No. 0990331-008-AC (PSD-FL-197G) is Pending: OsPLP requested an extension of time for the simultaneous operation of the cogeneration boilers with the sugar mill boilers in order to restart the cogeneration boilers. This is the current request being processed.

REVISION SUMMARY - PERMIT NO. PSD-FL-197

The Draft Permit incorporates revisions from previous air construction permit modifications made to the original Permit No. PSD-FL-197 and major Permit Modification No. PSD-FL-197A. It is also updated to be consistent with the Department's current permit format. Changes to the current version of the PSD permit are highlighted in the following ways:

- Text that will be deleted is marked as ~~striketrough~~.
- Text that is being added as a result of this current permitting action is marked with a wavy underline.
- As noted in the Draft Permit, the General Conditions that appeared on pages 2 through 5 in the most recent version of the PSD permit now appear in Appendix GC.
- As noted in the Draft Permit, Specific Condition No. 17 is a complete revision. The current version of this text, prior to revision, is provided below and in the Technical Evaluation and Preliminary Determination.
- As noted in the Draft Permit, the table of emissions standards in Specific Condition No. 19 was completely revised. The current version of this table, prior to revision, is provided below.

The following summarizes permitting history of revised conditions.

Specific Condition No. 1

April 12, 1994: This condition was revised to change the electric generating capacity from 60 MW to 65 MW by a letter revision.

October 16, 1995: The electric generating capacity was later revised from 65 MW to 74 MW by Project No. 0990331-001-AC (Permit No. PSD-FL-197A).

Specific Condition No. 15

October 21, 1997: This condition was revised to clarify that the 25% total heat input restriction was "to each boiler". The amount of coal firing was also reduced. This occurred in Project No. 0990331-006-AC when the standards for CO, Hg, NOx, Pb, and SO₂ were revised.

Specific Condition No. 16

October 21, 1997: This condition was changed to include calculated mercury and lead emissions in the 12 month rolling totals to be recorded in a monthly log. This revision occurred in Project No. 0990331-006-AC when the standards for CO, Hg, NOx, Pb, and SO₂ were revised.

Specific Condition No. 17

June 14, 1996: This condition was revised in Project No. 0990331-002-AC to extend simultaneous operation of the cogeneration and sugar mill boilers to beyond the first year of commercial startup of the cogeneration boilers to April 1, 1997. After April 1, 1997, the sugar mill boilers could only operate when both cogeneration were shut down or in the process of shutting down. The permit continued to require that the sugar mill boilers be rendered incapable of operation no later than January 1, 1999.

May 5, 1997: This condition was revised in Project No. 0990331-005-AC to extend simultaneous operation of the sugar mill boilers with the cogeneration boilers from April 1, 1997 to April 1, 1998. After April 1, 1998, the cogeneration boilers could only be operated when the sugar mill boilers were shut down or in the process of shutting down. The permit continued to require that the sugar mill boilers be rendered incapable of operation no later than January 1, 1999.

June 15, 1998: This condition was revised in and Project No. 0990331-007-AC to extend simultaneous operation of the sugar mill boilers with the cogeneration boilers from April 1, 1998 to April 1, 2000. Text referring to commercial operation was stricken and standby operation of the sugar mill boilers was allowed until

the interconnections (bagasse fuel and steam systems) between the cogeneration facility and the sugar mill are commercially and operationally reliable, but no later than April 1, 2000, provided the corresponding operating permits remained valid. Also, the text requiring the existing sugar mill boilers to be shutdown and rendered incapable of operation was revised from January 1, 1999 to when the interconnected operations are commercially and operationally reliable, but no later than April 1, 2001. The current version of this condition, prior to revision by the Draft Permit, is as follows:

- "17. The existing Boilers Nos. 2, 3, 4, 5, and 6 (Permit Nos. A0 50-269980, 203679, 165813, 203680, 165626, and 165814, respectively), may be retained for standby operation until the interconnections (bagasse fuel and steam systems) between the cogeneration facility and the sugar mill are commercially and operationally reliable, but no later than April 1, 2000, provided their operating permits are valid.

During the period from initial firing through April 1, 2000 both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr steam, (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugar mill, and the existing boilers' steam production reduced by an equivalent amount. After April 1, 2000, the cogeneration facility's boilers may be operated only when the sugar mill's boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing sugar mill boilers shall be shutdown and rendered incapable of operation when the interconnected operations are commercially and operationally reliable, but no later than April 1, 2001."

Specific Condition No. 19

October 21, 1997: This condition was changed in Project No. 0990331-006-AC to revise the table of emissions standards for CO, Hg, NOx, Pb, and SO₂. A BACT determination was made for NOx to increase the standard from 0.12 to 0.14 lb NOx per mmBTU of heat input achieved by selective non-catalytic reduction (SNCR). Note "e" for the table was revised to include the reduced coal firing specified in condition No. 15. The current version of this table, prior to revision by the Draft Permit, is provided on the next page of this document.

Specific Condition No. 20

April 18, 1997: This condition was changed in Project No. 0990331-004-AC to revise the test method for sulfuric acid mist to EPA Method 8, modified.

October 21, 1997: This condition was changed to add compliance with the emissions limitations to be demonstrated by "continuous emissions monitoring data" and clarified that testing for sulfuric acid mist was only required when coal or tire derived fuels were fired. The revisions occurred in Project No. 0990331-006-AC, which also revised the emissions standards for CO, Hg, NOx, Pb, and SO₂. This modification incorrectly referred to this condition as "21".

Specific Condition No. 25

June 15, 1998: This condition was revised in Project No. 0990331-007-AC to add "the status of the interconnection between the sugar mill and cogeneration plant" to the quarterly report.

Tire Derived Fuel Modifications

January 22, 1997: The Department issued a letter (Project No. 09903310003-AC) granting approval of a trial burn with tire derived fuel in order to conduct emissions performance testing for supporting information for a future modification of the PSD permit. Condition No. 11 of this authorization established a deadline of July 1, 1999.

REVISION SUMMARY - PERMIT NO. PSD-FL-197

May of 1997: The deadline to conduct a trial burn for tire derived fuel was extended from July 1, 1997 to August 31, 1997.

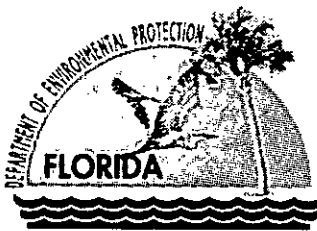
September 5, 1997: The deadline to conduct a trial burn for tire derived fuel was extended from April 1, 1998 to December 1, 1998. It was not extended and the authorization to conduct a trial burn with tire derived fuel has expired.

Emissions Table

The following is the current version of the table specifying the emissions standards (prior to revision by this permitting action) in Specific Condition No. 19. This table was last modified by Project No. 0990331-006-AC on October 21, 1997.

Pollutant	EMISSION LIMIT (per boiler) ^d						Total ^e Two Boilers (TPY)
	Biomass		No. 2 Oil		Bit. Coal		
	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	(lb/hr)	
Particulate (TSP)	0.03	22.8	0.03	18.0	0.03	15.9	123.1
Particulate (PM ₁₀)	0.03	22.8	0.03	18.0	0.03	15.9	123.1
Sulfur Dioxide							
3-hour average	---	---	---	---	1.2	636.0	---
24-hour average	0.10	76.0	0.05	30.0	1.2	636.0	---
Annual average					1.2 a	---	339.0 f
(Bagasse)	0.02 a b	---	---	---			
(Woodwaste)	0.05 a c						
Nitrogen Oxides							
Annual average	0.14	103 a	0.14 a	84.0 a	0.15 a	79.5 a	577
Carbon Monoxide							
24-hr average	0.35	266.0	0.35	210.0	0.35	185.5	1,436.4
Volatile Organic Compounds	0.06 b 0.04 c	45.6 b 30.4 c	0.03	18.0	0.03	15.9	219.2
Lead			8.9 x 10 ⁻⁷	0.0005	5.1 x 10 ⁻⁶	0.0027	0.27 f
(Bagasse)	2.7 x 10 ⁻⁶ b	0.002					
(Wood Waste)	1.6 x 10 ⁻⁴ c	0.12					
Mercury	3.5 x 10 ⁻⁶ b 4.0 x 10 ⁻⁶ c	0.0027 b 0.0030 c	2.4 x 10 ⁻⁶	0.0014	8.4 x 10 ⁻⁶	0.0045	0.0168 f
Beryllium	---	---	3.5 x 10 ⁻⁷	0.0002	5.9 x 10 ⁻⁶	0.0031	0.0013
Fluorides	---	---	6.3 x 10 ⁻⁶	0.004	0.024	12.7	5.25
Sulfuric Acid Mist	0.005	3.72	0.0025	1.5	0.010	5.3	6.0

The final version of this modification will be issued "clean" without revision marks or permitting notes.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

P.E. CERTIFICATION STATEMENT

PERMITTEE

Gus Cepero, Authorized Representative
Osceola Power Limited Partnership
P. O. Box 679
Pahokee, FL 33493

Osceola Cogeneration Plant

Project No.	0990331-008-AC
PSD Permit No.	PSD-FL-197G
SIC No.	2061, 4911
Emissions Units:	0990019: 001 - 007 0990331: 001, 002
Project:	Extension of Mill Boilers Revised Draft Permit

PROJECT DESCRIPTION

Osceola Power L.P. (OsPLP) constructed a cogeneration plant adjacent to the Osceola Farms sugar mill located east of Pahokee in Palm Beach County. The cogeneration plant fires bagasse and wood to produce process steam for the sugar mill and to generate electrical power for sale. The cogeneration plant was designed to completely replace the existing mill boilers. For the purposes of the Department's PSD construction and Title V operating permit programs, the two plants are considered a single facility. The original PSD application used the shutdown of the mill boilers as emissions decreases, which allowed the new plant to net out of several BACT determinations. The original PSD permit allowed limited operation of the mill boilers during a phased, shakedown period for the cogeneration plant. However, it also required permanent shutdown of the sugar mill boilers by January 1, 1999, which the Department later extended to April 1, 2001.

OsPLP requests a fourth extension for two additional years due to the lack of operating experience with the interconnections between the cogeneration plant and sugar mill and the uncertainty caused by the bankruptcy proceedings and the FPL lawsuit. In accordance with Permit No. PSD-FL-197, authorization to operate the sugar mill boilers has expired. As we discussed, the Revised Draft Permit:

- Authorizes operation of the sugar mill boilers from October 1, 2000 through April 30, 2001. This would provide an additional year to determine whether or not to restart the cogeneration plant. Contingent on the installation of mechanical dust collectors for the cogeneration boilers, operation of the sugar mill boilers would be extended to include the following milling season (October 1, 2001 through April 30, 2002). This would provide an additional year to restart the cogeneration plant and reestablish reliable fuel and steam interconnections with the sugar mill.
- Removes coal firing conditions from entire permit. Recognizes that the cogeneration boilers were designed to fire coal, but requires appropriate air construction and operation permits prior to firing coal.
- Requires a revised Air Quality Analysis for simultaneous operation of the cogeneration and sugar mill boilers. Requires operation in accordance with any constraints imposed by this analysis.
- Allows simultaneous operation of the sugar mill and cogeneration boilers to establish reliable fuel and steam interconnections between the cogeneration plant and the sugar mill. Simultaneous operation is limited to no more than a total of 2880 hours (120 days x 24 hours) to allow for a phase-in period. After 2880 hours of simultaneous operation or reestablishing reliable interconnections, operation of the sugar mill boilers is permitted only if both cogeneration boilers are inoperable due to electrical or mechanical failure.
- No later than August 1, 2002, requires **either** permanent shutdown of the sugar mill boilers, **or** surrender of the PSD permit for the cogeneration plant to the Department. A surrender of the PSD permit would relinquish authorization to operate the cogeneration plant. Furthermore, the Department will give no consideration to any existing equipment

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associated with the cogeneration plant in future permitting decisions. However, surrender of the PSD permit would allow the facility to continue operation of the sugar mill boilers in accordance with the Title V operation permit.

- Requires installation of a flue gas oxygen monitor with an audible alarm for each sugar mill boiler. Requires the purchase of oil containing no more than 1.0% sulfur by weight for use in sugar mill boilers.
- Requires submittal of quarterly reports summarizing operational status and progress.

The Department issued an initial Draft Permit on May 18, 2000. This revised Draft Permit addresses several issues and replaces the previous draft. The revised draft permit allows up to an additional two years to operate the sugar mill boilers in order to restart the cogeneration plant to and to reestablish reliable fuel and steam interconnections with the sugar mill. Although it extends the requirement to shutdown the sugar mill boilers, it does not affect any of the impacts addressed by the original Air Quality Analysis upon which the initial PSD permit was based. It does require verification of this analysis for simultaneous operations prior to allowing simultaneous operations. I believe this modification maintains the original intent of the initial PSD permit.

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).



Jeffery F. Koerner, P.E.

Registration Number: 49441

9-8-00

Date

Department of Environmental Protection
Bureau of Air Regulation, New Source Review Section
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Florida Department of Environmental Protection

TO: Clair Fancy, Chief – Bureau of Air Regulation
THROUGH: Al Linero, Administrator - New Source Review Section
FROM: Jeff Koerner, Project Engineer - New Source Review Section *JK*
DATE: September 7, 2000
SUBJECT: Osceola Power L.P.
Extension of Sugar Mill Boiler Operation (Revised Draft Permit)
Project No. 0990331-008-AC (PSD-FL-197G)

Osceola Power L.P. (OsPLP) constructed a cogeneration plant adjacent to the Osceola Farms sugar mill located east of Pahokee in Palm Beach County. The cogeneration plant fires bagasse and wood to produce process steam for the sugar mill and to generate electrical power for sale. The cogeneration plant was designed to completely replace the existing mill boilers. For the purposes of the Department's PSD construction and Title V operating permit programs, the two plants are considered a single facility. The original PSD application used the shutdown of the mill boilers as emissions decreases, which allowed the new plant to net out of several BACT determinations. The original PSD permit allowed limited operation of the mill boilers during a phased, shakedown period for the cogeneration plant. However, it also required permanent shutdown of the sugar mill boilers by January 1, 1999, which the Department later extended to April 1, 2001.

OsPLP requests a fourth extension for two additional years due to the lack of operating experience with the interconnections between the cogeneration plant and sugar mill and the uncertainty caused by the bankruptcy proceedings and the FPL lawsuit. In accordance with Permit No. PSD-FL-197, authorization to operate the sugar mill boilers has expired. As we discussed, the revised Draft Permit:

- Authorizes operation of the sugar mill boilers from October 1, 2000 through April 30, 2001. This would provide an additional year to determine whether or not to restart the cogeneration plant. Contingent on the installation of mechanical dust collectors for the cogeneration boilers, operation of the sugar mill boilers would be extended to include the following milling season (October 1, 2001 through April 30, 2002). This would provide an additional year to restart the cogeneration plant and reestablish reliable fuel and steam interconnections with the sugar mill.
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- Allows simultaneous operation of the sugar mill and cogeneration boilers to establish reliable fuel and steam interconnections between the cogeneration plant and the sugar mill. Simultaneous operation is limited to no more than a total of 2880 hours (120 days x 24 hours) to allow for a phase-in period. After 2880 hours of simultaneous operation or reestablishing reliable interconnections, operation of the sugar mill boilers is permitted only if both cogeneration boilers are inoperable due to electrical or mechanical failure.
- No later than August 1, 2002, requires **either** permanent shutdown of the sugar mill boilers, **or** surrender of the PSD permit for the cogeneration plant to the Department. A surrender of the PSD permit would relinquish authorization to operate the cogeneration plant. Furthermore, the Department will give no consideration to any existing equipment associated with the cogeneration plant in future permitting decisions. However, surrender of the PSD permit would allow the facility to continue operation of the sugar mill boilers in accordance with the Title V operation permit.
- Requires installation of a flue gas oxygen monitor with an audible alarm for each sugar mill boiler. Requires the purchase of oil containing no more than 1.0% sulfur by weight for use in sugar mill boilers.
- Requires submittal of quarterly reports summarizing operational status and progress.

This action makes no new BACT determinations. An initial Draft Permit was issued on May 18, 2000, which stopped the 90-day time clock. (Initial Day #74 was June 4, 2000). Day 90 will not be known until the applicant publishes a Public Notice for the Revised Draft Permit. I recommend your approval of the attached Intent to Issue package for this project.

JFK
Attachments