



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

August 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road - 13th Floor  
Bethesda, Maryland 20814

Dear Mr. Fickett:

RE: Request for Permit Amendment  
Cedar Bay Cogeneration Project  
PSD-FL-137(B); Duval County

The Department received your request of May 12, 1995, to make minor amendments to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizer/conveyor for the above referenced PSD permit. The permit's specific conditions are amended as shown:

II. B. 4. Material handling sources shall be regulated as follows:

- a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building  
Coal Silo Conveyor  
Limestone Pulverizers (2) /Conveyors  
Limestone Storage Bins (2)  
Bed Ash Hopper  
Bed Ash Separator  
Bed Ash Silo Vent  
Fly Ash Silo Vent  
Fly Ash Separators (2)  
Bed Ash Receiver Bin  
Fly Ash Receiver Bin  
Pellet Vibratory Screen System  
Pelletizing-Ash Recycle Tank  
Pelletizing-Recycle-Hopper  
Cured Pellet Screening Recycle Conveyor System  
Pellet Recycle Conveyor  
Pelletizing Rail Loadout

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

Mr. Kent Fickett  
August 8, 1995  
Page Two

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 ~~17~~-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 ~~17~~-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- b. The PM emissions from the following process equipment, and/or facility equipment, in the material handling and treatment area sources shall be controlled using-wet suppression/removal-techniques as follows:

<u>Coal-Car-Unloading</u>	
Ash Pellet Hydrator:	<u>Scrubber</u>
Ash Pellet Curing Silos:	<u>Scrubber</u>
Ash Pelletizing Pan:	<u>Scrubber</u>

The above listed sources are subject to a visible emissions (VE) and a particulate matter (PM) emissions limitation requirement of 5 percent % opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 ~~17~~-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM emissions using EPA Methods 9 and 5, respectively, in accordance with Rule 62 ~~17~~-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- c. Fugitive emissions from the following material handling and transport sources shall be controlled as follows:

<u>Coal Car Unloading:</u>	<u>Wet Suppression using continuous water sprays during unloading.</u>
<u>Dry Ash Rail Car Loadout:</u>	<u>Using closed or covered containers under negative air pressures during ash loadout; and using water sprays prior to removal of rail car loadout cap when loading open rail cars.</u>

Mr. Kent Fickett  
 August 8, 1995  
 Page Three

The above listed sources are subject to a visible emission (VE) limitation requirement of five percent (5%) opacity in accordance with Rule 62-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE using EPA Method 9 or other FDEP approved methods in accordance with Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial visible emission testing shall be conducted within 90 days after final DEP approval of these facilities or within 90 days after completion of construction of the source, whichever occurs last. Ash shipped in open rail cars will either be pelletized or be sprayed with water to create a crust on the top layer of non-pelletized ash. Removal of bottom and fly ash from the Project site by any means other than by rail shall require the prior approval of DEP and RESD of the method(s) of fugitive emissions control.

7. The maximum emissions from each of the Limestone Pulverizers/Conveyors (including limestone dryer) limestone dryers shall not exceed the following: ~~while using oil shall not exceed the following (based on AP-42 factor, Table 17-3-1, Industrial Distillate, 10/86)~~

Estimated Limitations

<u>Pollutant</u>	<u>lbs/hr</u> <u>Dryers</u>	<u>TPY</u>	<u>TPY for 2 Pulverizers/Conveyors</u>
PM/PM <sub>10</sub>	1.26* 0-24	1.68 0-32	3.36 0-64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO <sub>x</sub>	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO<sub>2</sub>, CO, NO<sub>x</sub>, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

\* This reflects the emission limitation for the limestone pulverizers/conveyor in Condition II.B.4.a. and limits the emission for the Limestone Pulverizers/Conveyors and the dryer.

Visible emissions from the limestone pulverizers/conveyors dryers shall not exceed 5% opacity.

Mr. Kent Fickett  
August 8, 1995  
Page Four

A copy of this letter shall be attached to the above mentioned permit, No. PSD-FL-137(B), and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sa/t

cc: C. Kirts, NED  
S. Pace, RESD  
H. Oven, PPS  
J. Harper, EPA  
J. Bunyak, NPS  
D. Roberts, HGS&S

## Final Determination

The permit amendment to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizers/conveyors for Cedar Bay Cogeneration, located in Duval County, Florida, was distributed on July 5, 1995. The Notice of Intent to Issue was published in the Florida Times Union on July 17, 1995. Copies of the amendment were available for public inspection at the Department Offices in Jacksonville and Tallahassee.

No comments were submitted by the National Park Service and the U.S. Environmental Protection Agency. Comments were submitted by the applicant relating to typographical errors in the draft permit amendment. The Department agrees with those findings by the applicant, and appropriate changes were made.

The final action of the Department will be to issue the PSD permit (PSD-FL-137B) with the changes noted above.

**HOPPING GREEN SAMS & SMITH**

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 425-3415

July 17, 1995

JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN BLIZZARD  
ELIZABETH C. BOWMAN  
RICHARD S. BRIGHTMAN  
PETER C. CUNNINGHAM  
RALPH A. DeMEO  
THOMAS M. DeROSE  
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DOUGLAS S. ROBERTS  
LISA K. RUSHTON  
R. SCOTT RUTH  
JULIE R. STEINMEYER  
  
OF COUNSEL  
CARLOS ALVAREZ  
W. ROBERT FOKES

BY HAND DELIVERY

Penny Rolleston  
Office of General Counsel  
Department of Environmental Protection  
2720-H Blair Stone Road  
Tallahassee, FL 32399

Re: Cedar Bay Cogeneration Project - Comments on Pending Modification Order, PA  
88-24B

Dear Penny:

Attached is a marked-up copy of the draft final order modifying the conditions of certification for the Cedar Bay Cogeneration Project. Our comments are reflected in the hand-written notes and changes on the order itself.

Two significant items need to be revised in this order. First, in the last paragraph on the first page of the draft final order, the words "short fiber test burn" need to be stricken because this order is not granting any modification concerning that test burn. As we previously requested, the Department's final order on that matter will be deferred until at least January 1996.

Additionally, the first sentence at the top of the second page should be stricken since there are no gasifiers associated with the Cedar Bay Project. It appears this is language from another certification modification order that was inadvertently included in this order.

At several locations we have indicated the plural form of the word "pulverizer". This is only a clarification of the fact that there are multiple existing pulverizers at the Project and does not represent any intervening change in the Project design, equipment or emissions.

Penny Rolleston  
July 17, 1995  
Page 2

We appreciate the opportunity to provide these comments. Should you need any clarification on any of these, please do not hesitate to contact me.

Sincerely,



Douglas S. Roberts

DSR/gs

cc: Hamilton S. Owen, DEP OSC  
Syed Arif, DEP BAR  
Chip Collette, DEP OGC  
Mark Carney, U.S. Generating Co.  
Sandy Hartman, U.S. Generating Co.

NED  
EPA  
NPS  
Cleve

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION )  
CEDAR BAY COGENERATION PROJECT )  
CEDAR BAY COGENERATION, INC. )  
U.S. GENERATING COMPANY )

OGC NO. 88-1089  
CERTIFICATION NO. PA 88-24B

6/28/95

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 18, 1991, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification of the Cedar Bay Cogeneration Project. That certification order approved the construction and operation of a fluidized bed, coal fired cogeneration power plant and associated facilities to be located in Duval County, Florida. The facility is operated by Cedar Bay Cogeneration, Inc. (CBC) a subsidiary of U.S. Generating Company.

On October 31, 1994, CBC filed a request to modify the conditions of certification pursuant to section 403.516(1)(b), Florida Statutes, (F.S.). CBC requested relief from conditions controlling the storage, handling, <sup>SHIPPING</sup> disposal and reuse of solid wastes produced by the combustion of coal. <sup>emissions from the material handling system and</sup>

Copies of CBC's request were distributed to all parties to the certification proceeding and made available for public review. On March 24, 1995, the Department published a Notice of Intent to Issue the Proposed Modification in the Florida Administrative Weekly. Copies of the intent to issue were sent to all parties to the original proceeding. As of March 23, 1995, all of the parties to the original proceeding had received copies of the intent to issue. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No timely objection to the proposed modifications was received by the Department. <sup>that are set forth below</sup>  
<sup>The other matters that were addressed in the original modification request and in the Department's proposed</sup>  
Accordingly, in the absence of any timely objection, IT IS ORDERED:

The proposed modifications to the Conditions of Certification relating to ~~short fiber test~~ <sup>material handling emissions sources</sup> and solid waste disposal at the Cedar Bay Cogeneration Facility are hereby APPROVED.

Post-It™ brand fax transmittal memo 7671 # of pages 5  
To: *DEP* From: *Doug Roberts*  
Co. *DEP* Co. *DEP*  
Dept. Phone # *921-9642*  
Fax # *224-8551* Fax #

1 Order of modification, but that are not further addressed herein will be addressed in separate orders at a later date



DRAFT

The Department does not feel that the change of mercury emission test procedures is necessary at this time since no gasifiers have been constructed, but may be approved upon submission of additional information pursuant to Florida Administrative Code Rule 62-17-297.620, and Condition II.A.10. Pursuant to section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Cedar Bay Cogeneration Project as follows:

o  
 DELETE  
 SENTENCE  
 NOT RELAT  
 TO  
 CEDAR BAY

II. B. 4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor <sup>s (2)</sup>
- Limestone Pulverizer/Conveyors
- Limestone Storage Bins (2)
- Bed Ash Hopper
- Bed Ash Separator
- Bed Ash Silo Vent
- Fly Ash Silo Vent
- Fly Ash Separators (2)
- Bed Ash Receiver Bin
- Fly Ash Receiver Bin
- Pellet Vibratory Screen System
- Pelletizing Ash-Recycle Tank
- Pelletizing Recycle Hopper
- Cured Pellet Screening Recycle-Conveyor System
- Pellet Recycle Conveyor
- Pelletizing Rail Loadout

The emissions from the above listed sources are subject to the particulate emission

DRAFT

limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 47-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 47.297, F.A.C., and 40 CFR 60, Appendix A (July, 1992+ version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled ~~(using wet suppression/removal techniques as follows:~~

↑  
STRIKE  
THROUGH TEXT

~~Coal Car Unloading~~

Ash Pellet Hydrator: ↓ Scrubber

Ash Pellet Curing Silos: Scrubber

Ash Pelletizing Pan: ↑ Scrubber

↑  
LINE UP TEXT

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5 percent opacity and 0.01 gr/dscf (applicant-requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 47 296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Rule 62 47 297, F.A.C., and 40 CFR 60, Appendix A (July, 1992+ version).

c. Fugitive emissions from the following material handling and transport sources shall be controlled as follows:

Coal Car Unloading:            Wet Suppression using continuous watersprays during unloading.

DRAFTDry Ash Rail Car Loadout:

Using closed or covered containers under negative air pressure during ash loadout; and using water sprays prior to removal of rail car loadout cap when loading open rail cars.

The above listed sources are subject to a visible emissions (VE) limitation requirement of five percent (5%) opacity in accordance with Rule 62-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE using EPA Method 9 or other FDEP approved methods in accordance with Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial visible emission testing shall be conducted within 90 days after final DEP approval of these facilities or within 90 days after completion of construction of the source, whichever occurs last. Ash shipped in open rail cars will either be pelletized or be sprayed with water to create a crust on the top layer of non-pelletized ash. Removal of bottom and fly ash from the Project site by any means other than by rail shall require the prior approval of DEP and RESD of the method(s) of fugitive emissions control.

7. The maximum emissions from each of the <sup>S</sup>Limestone Pulverizer/Conveyors (including limestone dryer) ~~limestone dryers~~ shall not exceed the following: <sup>^</sup>while using oil shall not exceed the following (based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86)

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Estimated Limitations

<u>Pollutant</u>	<u>lbs/hr.</u>	<u>TPY</u>	<u>TPY</u> for 2 pulverizer/conveyors dryers
PM/PM10	1.26* 0.24	1.68 0.32	3.36 0.64
SO2	0.85	1.15	2.3
CO	0.60	0.81	1.62
NOx	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO2, CO, NOx, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86).

\* This reflects the emission limitation for the limestone pulverizer/conveyor in Condition II.B.4.a. and limits the emission for the limestone Limestone Pulverizer/Conveyor and the dryer.

Visible emissions from the limestone pulverizer/conveyors dryers shall not exceed 5% opacity.

1X. SOLID WASTE STORAGE AND DISPOSAL

CBCP shall be responsible for arranging for the proper storage, handling, disposal or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the CBCP facility shall be removed from the site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash may will be pelletized, or made into aggregate form, and shall be either shipped by rail back to the mine, or to a permitted disposal area outside Duval County, utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by Ash may be shipped offsite to companies specializing in the marketing and utilization of combustion by-products. Fugitive emissions from storage and handling of ash materials will be controlled in accordance with these conditions and Department

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rules. Open rail cars used to ship dry ash will be sealed to prevent leaks of ash during transport. There shall be no outside storage of CFB ash prior to pelletization or loadout of ash to sealed rail cars for removal from the site. The bottom ash and fly ash shall not be disposed of in a landfill within Duval County. If the CBCP decides to dispose of the bottom ash or fly ash by other than returning it to the mine site or a permitted disposal site outside Duval county, they shall notify RESD and DEP. Subsequent changes to the ash pelletization system which result in new or modified emissions sources or discharges shall require submittal of a request for modification of this certification, in accordance with section 403.516, F.S.

The remainder of Condition IX remains the same.

Any party to this Order has the right to seek judicial review of the Order pursuant to section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this \_\_\_\_\_ day of \_\_\_\_\_, 1995 in Tallahassee, Florida.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

\_\_\_\_\_  
VIRGINIA B. WETHERELL  
Secretary  
Marjory Stoneman Douglas Bldg.  
3900 Commonwealth Boulevard  
Tallahassee, FL 32399-3000  
(904) 488-4805

**Cedar Bay Generating Company,  
Limited Partnership**

August 13, 1993

**RECEIVED**  
AUG 16 1993

Division of Air  
Resources Management

C. H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**Cedar Bay Cogeneration Project**  
**Permit No.: PSD-FL-137**

Dear Mr. Fancy:

In response to our recent telephone conversation, I write to provide the materials that you need to support your recommendations to EPA that it revise Permit No.: PSD-FL-137 (the Air Permit) for Cedar Bay Cogeneration, Inc.'s (CBC's) Cedar Bay Cogeneration Project (the Project). Because the Project is subject to Florida's Power Plant Siting Act and because EPA wants to make final decisions on PSD permits for such facilities, a copy of this letter is being forward to Region IV.

As you recall, on April 13, 1993, the Parties to AES Cedar Bay, Inc., and Seminole Kraft Corporation v. State of Florida Department of Environmental Regulation, DOAH Case No. 88-5740, including the Florida Department of Environmental Protection (DEP) and CBC, filed a Settlement Stipulation with the Hearing Officer. In that Stipulation, the Parties agreed to recommend to the Siting Board that it modify the Conditions of Certification for the Project to include, among other things, more stringent emission limitations. On May 11, 1993, the Siting Board followed that recommendation and adopted an order modifying the conditions of certification.

Because Paragraph 23 of that Settlement Stipulation expressed the Parties' view that the Air Permit for the Project needed to be amended to include the recommended modifications that are applicable to the Project's Air Permit, we appreciate your focusing on revising the Air Permit. The needed changes are summarized in Enclosure 1.

As you can see from this summary, the changes ordered by the Siting Board, in accordance with the Settlement Stipulation, will result in substantial emission reductions from the Project. These emission reductions will in turn reduce the air quality impacts from the Project.



August 13, 1993

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Under EPA's guidance on permit modifications, changes that do not involve increases in source emissions or in air quality impacts may be considered permit "amendments," which may be accomplished through simple administrative action without further public review or proceedings. (United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985) at p. 11.) In any event, the Air Permit amendments that are the subject of this letter have already been fully disclosed, debated, and resolved as part of the Site Certification process; and the Settlement Stipulation suggests no further formal proceedings are desired by the parties.

To facilitate your processing of our request, we have also enclosed three other documents:

Enclosure #	Contents
2	A marked-up version of the current Air Permit
3	A clean version of the Air Permit as we would recommend that it be revised
4	A draft package for you to send to EPA should you accept our recommendations

If you have any questions, please do not hesitate to call me at 301/718-6899.

Sincerely,

*Mark V. Carney*  
Mark V. Carney

Enclosures

cc: Patrick M. Tobin  
Jewell Harper  
Gregory Worley  
Richard Donelan



**ENCLOSURE 1**

**SUMMARY OF CHANGES TO THE PROJECT'S AIR PERMIT**



## **SUMMARY OF CHANGES TO THE PROJECT'S AIR PERMIT**

CBC recommends the following changes in the Air Permit for the Project to reflect the May 11, 1993 Order of the Siting Board that was entered following settlement consistent with the recommendations of DEP and with the evolving designing and construction of the Project:

### **ADMINISTRATIVE CHANGES IN OWNER**

1. Cedar Bay Cogeneration, Inc., is a general partner and the sole limited partner of Cedar Bay Generating Company, Limited Partnership. The other general partner of Cedar Bay Generating Company, Limited Partnership is Cedar II Power Corporation, which is indirectly partially owned by a subsidiary of Bechtel Enterprises, Inc. Cedar Bay Cogeneration, Inc. was formerly known as AES Cedar Bay, Inc. Cedar Bay Cogeneration, Inc. is indirectly partially owned by a subsidiary of PG&E Enterprises. The change in the name of the permit from AES Cedar Bay, Inc. to Cedar Bay Cogeneration, Inc. is to reflect the change in project ownership, as described above.

### **REDUCTION IN STACK EMISSIONS FROM THE CFBs**

2. The Project's circulating fluidized bed boilers ("CFBs") will be operated with the emissions summarized in Table 1, which are substantially lower than those in the current Air Permit. As indicated in that table, the Project will achieve lower emissions of (a) SO<sub>2</sub> and acid gases with further restrictions on the sulfur content of the coal to be burned and by feeding to its CFBs limestone of the requisite quality and quantity; (b) NO<sub>x</sub> by installing a selective non-catalytic reduction system; (c) particulate matter (and trace metals) by enhancing maintenance of the fabric filter; and (d) CO by properly managing combustion. The sulfur content of the Project's start-up oil is also being reduced to 0.05%. These parameters that are associated with lower emissions should be reflected in the first page of the Air Permit and in Permit Conditions A.1.d and e, A.2, A.3-9, C.5, and C.6 and a new provision A.4.

3. An innovative technique for possible further reductions in mercury emissions is to be tested on one of the Project's CFBs. Language to reflect this test program should be added to Specific Condition A.2.

### **REFINEMENTS IN DESIGN AND OPERATION OF THE LIMESTONE DRYERS AND OTHER MATERIALS HANDLING EQUIPMENT**

4. The limestone dryers can produce the limestone needed for input to the CFBs by operating 11 hours per day and 2920 hours per year. This change has the effect of, for example, reducing the annual emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM, CO, and VOCs from the dryers by two thirds. The sulfur content of the limestone dryers' fuel oil can also be reduced to 0.05%. For certain other materials handling equipment, additional emission controls have been incorporated into the design of the Project as has a more conservative method for characterizing aggregate emissions

from materials handling equipment controlled with fabric filters. Language to reflect these refinements should be added to Specific Conditions B.1-8, and new B.6 should be inserted.

### **OPERATIONAL PARAMETERS**

5. Though the existing limitations on the Project's total heat input and coal usage are still current, changes to three operational parameters that could affect coal usage are warranted:

A. The Air Permit currently requires the Project to maintain boiler load between 70% and 100% of the design rated heat capacity. Because the Project can be dispatched by the Florida Power and Light Company and since the Project can meet its environmental requirements at lower loads, Specific Condition A.9.b should be revised to allow operation of the Project at lower loads, in response to swings in load demand.

B. Given recent experience with the type of CFBs to be used at the Project, a greater number of start-ups and shutdowns are anticipated in the first two years of operation as the Project completes its shake-down period. As a result, an increase in the total amount of low sulfur oil burned during facility start-up is anticipated. An amendment to Specific Conditions A.1.e and B.7 is needed to allow for an increase in the use of low sulfur oil for start-ups of the Project.

C. The CFBs at the Project are currently permitted to derive as much as 4% of their heat input from the firing of waste bark from Seminole Kraft Corporation's (SKC's) pulping operation. However, with SKC's conversion of its pulping operation to a recycling system, short fiber recycle rejects and not bark waste will be available for the Project's use. Because the carbonaceous material in the recycle rejects can replace some of the Project's coal and because the recycle rejects would have to be land-filled if not burned, the Project proposes a test to ascertain whether it is technically feasible to burn recycle rejects in two of its CFBs and whether they can burn recycle rejects in compliance with proposed emission limitations and other legal requirements. The Project is seeking approval to burn as much as 420 cubic yards per day of recycle rejects as an alternative boiler fuel for two of the CFBs if these two conditions are satisfied. Revision of the first page of the Air Permit and Specific Conditions A.1.b, A.1.h, and A.9.c would permit this process to proceed.

6. Since the Project does not expect to utilize natural gas as a start-up fuel for the CFBs or as a fuel for the limestone dryers, the provision for this alternative fuel in Specific Conditions A.1.e, A.9.c, B.6, and B.7 can be deleted from the Air Permit.

## **MISCELLANEOUS REVISIONS**

7. Also needed are a number of ministerial revisions: changes throughout the Air Permit to reflect renumbering of applicable regulations; changes on the first page of the Air Permit to reflect recent PSC orders; clarifying changes in the wording of General Permit Condition 13 to confirm that the Project's terms and conditions satisfy all requirements of the applicable preconstruction permit programs; and changes to language in General Condition 2 and in Specific Conditions 1, A.1.f and g, A.6, A.8.f, A.10, B.2 (Note), B.4, B.5, C.1, C.3, and D of the Air Permit to enable it to better describe the Project, as modified, and to maintain consistency with the conditions of certification. In addition, new provisions A.13-16 and C.10 need to be added. Finally, changes throughout the Air Permit are needed to make it internally consistent.

**TABLE 1: COMPARISON OF CFB EMISSIONS, AS PERMITTED VERSUS AS MODIFIED**

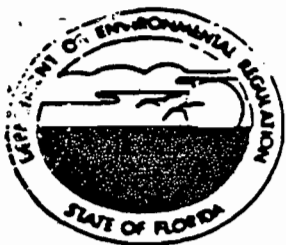
**Annual Emissions (tons per year) of the Project's CFBs**

<b><u>Emissions</u></b>	<b><u>As Permitted</u></b>	<b><u>As Modified</u></b>	<b><u>Method</u></b>
<b>Particulates</b>			
PM-10	257	234	Enhanced Maintenance for the Fabric Filtration of PM-10 and Trace Metals
Lead	91	0.78a	
Beryllium	1.5	0.11a	
Hg	3.4	0.38a	
<b>Acid Gases</b>			
SO <sub>2</sub>	4,015	2,598	Lower Sulfur Coal and Higher Ca/S Ratio Supplied to the CFBs
Fluorides	1,122	9.7a	
H <sub>2</sub> SO <sub>4</sub> Mist	308	6.1	
NO <sub>x</sub>	3,767	2,208	Add SNCR
<b>Products of Incomplete Combustion</b>			
CO	2,468	2,273	Improved Combustion Controls
VOCs	195	195	
<b>Totals</b>	<b>12,227.9</b>	<b>7,525.07</b>	

a These reductions are due in part to revised emission factors for the Project's coal supply.

**ENCLOSURE 2**

**MARKED-UP VERSION OF THE AIR PERMIT**



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carli M. Browner, Secretary

March 28, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeff Swain  
AES/Cedar Bay Inc.  
1001 North 19th Street  
Arlington, Virginia 22209

Dear Mr. Swain:

Re: AES/Cedar Bay Inc.  
Cogeneration Project, PSD-FL-137

Please find enclosed the above referenced permit. You have the right to petition for an administrative hearing pursuant to Section 120.57, Florida Statutes, within 14 days of receipt of this permit or file a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within 30 days from the date this permit is filed with the Clerk of the Department. Further, you may request a public hearing. Such request must be submitted within 30 days of receipt of this permit.

If you have any questions, please call Barry Andrews at (904)488-1344 or write to me at the above address.

Sincerely,

*fu* C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/kt

enclosure

cc: J. Harper, EPA  
A. Kutyna, NE District  
K. Kurts, BESD  
T. Cole, Oertel & Hoffman

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on 3-29-91.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Keri Baker  
Clerk

3-29-91  
Date

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**Final Determination**

**AES/Cedar Bay Inc.  
Cogeneration Project  
Duval County, Florida**

**Permit No: PSD-FL-137**

**Florida Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation**

**March 28, 1991**



## BEST AVAILABLE COPY

## Final Determination

AES/Cedar Bay, Inc.'s PSD permit application (part of the Power Plant Siting application), has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated March 27, 1991 (see attachment 2) are addressed below.

Public Notice

The EPA questioned why the notice was published on the same date that the Site Certification Hearing was scheduled to begin, thereby not providing a 30 day notice and comment period.

Notice was published originally on December 8, 1989, for a January 8, 1990 hearing. A copy of the proposed Notice was sent to Region IV on December 1, 1989 for review. No comments were received regarding the increment consumptions reflected in the Notice sent to EPA. The hearing was then postponed from January 8, 1990 to February 5, 1990. The hearing then had to be continued on February 20, 1990 for which the Notice was published on February 12, 1990. In addition, public access hearings were held on February 7, 1990 and February 21, 1990 for nonparty members of the public. The public always has the right to speak. Only if they intervene as a formal party do they need an attorney as required by Florida law.

RACT Analysis

The Department agrees with EPA that add-on NOx controls are technically feasible for the AES/Cedar Bay project. The decision to establish the NOx limitation at 0.29 lb/MMBtu was based on the overall benefits that would be obtained from the construction of the cogeneration facility (the additional cost of SNCR would cause the project to become financially unfeasible). The circulating fluidized bed (CFB) boilers will replace older boilers which have higher emissions per heat input. In addition, the 0.29 lb/MMBtu limitation was judged to be the most stringent limitation placed on a coal fired boiler which does not have add-on NOx controls.

For sulfur dioxide, the Department evaluated the cost of switching to a lower sulfur coal and determined that such a cost was prohibitive. It should be noted that the decision to limit the average annual sulfur content to 1.7 percent is well below the initial proposal of 3.3 percent by the applicant. With regard to the control efficiency, the Department believes that 90 percent efficiency is reasonable for the CFB design.

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# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

Cedar Bay Cogeneration, Inc  
7475 Wisconsin Avenue  
Bethesda, MD 20814-7422

**EMITTER:**  
S/Cedar Bay, Inc.  
01 North 19th Street  
Blington, VA 22209

Permit Number: PSD-FL-137  
County: Duval  
Latitude/Longitude: 30°25'21"N  
81°26'23"W

Project: Cedar Bay Cogeneration Project (FAC)

<sup>air</sup> This permit is issued under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code Chapters 17-210 and 17-4. The above named permittee is hereby authorized to perform the work to operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

This permit is for the installation of an integrated cogeneration power plant complex at the Seminole Kraft Corporation facility located in Jacksonville, Florida. The power complex will consist of three ~~coal-bark~~ fired circulating fluidized bed (CFB) boilers, the respective coal handling equipment, and limestone dryers, to be owned and operated by AES Cedar Bay, Inc. and operated under contract with the U.S. Operating Services Company. The CFB boilers, <sup>4</sup> rated at 3,189 MMBtu/hr, will burn fuel made up of approximately ~~96 percent coal and 4 percent bark~~. The boilers will generate steam to produce power from a turbine generator set. The cogeneration facility will generate ~~225 MW~~ of electricity for sale to Florida Power & Light as well as low pressure process steam for the Seminole Kraft Corporation.

Nitrogen oxides will be controlled by the good combustion characteristics which are an inherent part of the CFB technology. Sulfur dioxide will be controlled by limiting the average annual sulfur content to 1.7% and the inherent limestone scrubbing provided by the CFB technology. Particulates will be controlled with fabric filters. <sup>1.2%</sup>

Construction shall be in accordance with the permit application and additional information submitted except as otherwise noted in the Specific Conditions.

### Attachments:

1. Power plant site certification package PA 88-24 and its associated attachments, dated January 19, 1990.
2. Letter from EPA dated March 27, 1991.
3. DER's Final Determination dated March 28, 1991. (see back of page)

\* whose principal fuel will be coal;

<sup>3</sup> a cooling tower;

<sup>5</sup> largely or exclusively coal

<sup>2</sup> ash, and other material

<sup>4</sup> permitted to input heat at the rate of

<sup>6</sup> with the possibility that two CFBs will fire some short fiber recycle rejects from their at...

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**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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 of 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 acknowledgement 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.

PERMITTEE:  
~~ABC~~ Cedar Bay Inc.

*Cogeneration* ;

Permit No. AC PSD-FL-137  
County: Duval

**GENERAL CONDITIONS:**

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 any 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 proscribed by Sections 403.73 and 403.111, Florida 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,

PERMITTEE: <sup>Cogeneration</sup>  
 A287 Cedar Bay Inc.

Permit No. AC PSD-FL-137  
 County: Duval

**GENERAL CONDITIONS:**

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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- a. ~~(x)~~ Determination of Best Available Control Technology (BACT) ←
- b. ~~(x)~~ Determination of Prevention of Significant Deterioration (PSD) ←
- c. ~~(x)~~ Compliance with New Source Performance Standards and with New Source Review for Non-attainment ←

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 for 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.

Logeneration :

PERMITTEE:  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

General Conditions:

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.

II SPECIFIC CONDITIONS:

1. The construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-2, F.A.C.. In addition to the foregoing, AESCB shall comply with the following conditions of certification as indicated. CBCP

through  
210-297

A. Emission Limitations for AES Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr, 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr, 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

see back of page

~~b. The maximum wood waste (primarily bark) charging rate to the No. 1 and No. 2 CFBs each shall neither exceed 15,653 lbs/hr, nor 63,760 TPY. This reflects a combined total of 31,306 lbs/hr, and 127,521 TPY for the No. 1 and No. 2 CFBs. The No. 3 CFB will not utilize woodwaste, nor will it be equipped with wood waste handling and firing equipment.~~

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr for all three units.

d. The sulfur content of the coal shall not exceed 1.2% by weight on an annual basis. The sulfur content shall not exceed 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with natural gas or No. 2 fuel oil with a maximum sulfur content of 0.3% by weight. The fuel oil or natural gas shall be used only for startups. The maximum annual oil usage shall not exceed 160,000 gals/year, nor shall the maximum annual natural gas usage exceed 22.4 MCF per year. The maximum heat input from the fuel oil or gas shall not exceed 1120 MMBtu/hr for the CFBs.

1,900,000

\* normally only be used for

380

each of

During commercial operation the

Note: ~~at the~~ Conditions 1.h, 2.c, 2.d, 2.e, and 4 on back side of page

PERMITTEE:  
 Cogeneration  
 ASB/Cedar Bay Inc.

Permit No: AC PSD-FL-137  
 County: Duval

f. The CFBs shall be fueled only with the fuels permitted in Conditions 1a, 1b, and 1c above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to ~~condition 1d, Modification of Condition~~ II.A.12 and B.11. SK  
right  
hand

g. The CFBs may operate continuously, i.e., 8760 hrs/yr., but shall not exceed  $25.98 \times 10^6$  MMBtu/yr total annual heat input.  
 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection <sup>and fuel sulfur limitations,</sup> for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu		Emission Limitations			
			lbs/hr	TPY	TPY for 3 CFBs	
CO	0.15	0.175 <sup>1</sup>	202 186 <sup>1</sup>	823 758	2468	2273
NOx	0.29 <sup>3</sup>	0.17 <sup>2</sup>	308.3 180.7 <sup>2</sup>	1256 736.1	3767	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	0.60 (3-hr avg.)	637.8 255.1 <sup>3</sup>	--	--	--
	0.20 <sup>4</sup>	0.31 (12-MRA)	129.5	1338 866	4015	2598
VOC	0.015		16.0	65	195	
PM	0.020	0.018	21.3 19.1	87 78	260	234
PM <sub>10</sub>	0.020	0.018	21.3 19.1	86 78	257	234
H <sub>2</sub> SO <sub>4</sub> mist	0.024	4.66 e-04	25.5 0.50	103 2	308	6.1
Fluorides	0.086	7.44 e-04	91.4 0.79	374 3.2	1122	9.7
Lead	0.007	6.03 e-05	7.4 0.06	30 0.26	91	0.78
Mercury	0.00026	2.89 e-05	0.276 0.03	1.13 0.13	3.4	0.38
Beryllium	0.00011	8.70 e-06	0.117 0.01	0.5 0.04	1.5	0.11

[Note: TPY represents a 93% capacity factor.] ~~MRA refers to a twelve month rolling average.~~

5. f. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. f. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, <sup>1992</sup> ~~1988~~ version of 40 CFR Parts 60 and 61, and ~~listed in Condition No. 7 of this permit or by equivalent methods after prior DER approval.~~ (see top of next page)

(1) Eight hour rolling average, except for initial and annual compliance tests and the CEM certification, when 1-hour standard applies.

(2) Thirty-day rolling average

(3) Three-hour rolling average

(4) Twelve-Month rolling average (Page 6 of 13 (MRA))

Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub> and SO<sub>2</sub> and with the capacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMS) identified in Condition No. II.A.9.

PERMITTEE:

ABB Cedar Bay Inc.

Logan Station

Permit No. AC PSD-FL-137

County: Duval

7.8. The CFBs are subject to 40 CFR Part 60, Subpart D<sup>A and D<sub>9</sub></sup>; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply. <sup>permit</sup>

8.7. Compliance Tests for each CFB

and subsequent ammonia,  
a. Initial compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, lead, fluorides, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, SO<sub>2</sub> and NO<sub>x</sub>, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate of each permitted fuel.

e. The following test methods and procedures of 40 CFR Parts 60 and 61 or other DER approved methods with prior DER approval shall be used for compliance testing: <sup>DEP</sup> <sup>Rule 17-297, F.A.C., and</sup> <sup>DEP</sup>

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead. <sup>13A or</sup>
- (12) Method 13B for fluorides.
- 14 (13) Method 25A for VOCs. <sup>18 or</sup>
- 15 (14) Method 101A for mercury. <sup>or EPA Method 29</sup>
- 16 (15) Method 104 for beryllium.

(13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.

(17) Method 201 or 201A for PM<sub>10</sub> emissions.

(19) Ammonia (NH<sub>3</sub>) method to be determined by the Department



Note: see back of page for content of 9 and 9f

PERMITTEE: <sup>Cogeneration</sup>  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

9 ~~8. Continuous Emission Monitoring for each CFB AESCB shall use Continuous Emission Monitors (CEMS) to determine compliance. CEMS for opacity, SO<sub>2</sub>, NOx, CO, and O<sub>2</sub> or CO<sub>2</sub>, shall be installed, calibrated, maintained and operated for each unit, in accordance with 40 CFR 60.47a and 40 CFR 60 Appendix F.~~

~~a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.~~

a ~~b.~~ CEMS data shall be recorded and reported in accordance with Chapter <sup>17-297</sup> ~~17-2~~, P.A.C., and 40 CFR <sup>60.49a and 60.7</sup> ~~60~~. A record shall be kept for periods of startup, shutdown and malfunction.

b ~~c.~~ A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c ~~d.~~ The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

d ~~e.~~ Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e ~~f.~~ For purposes of reports required under this <sup>permit</sup> ~~certification~~, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. ~~10~~ herein, which exceeds the applicable emission limit in Condition No. ~~3~~.

10 ~~9.~~ Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

~~b. The furnace heat load shall be maintained between 70% and 100% of the design rated capacity during normal operations.~~

b ~~c.~~ <sup>All</sup> The coal, bark, natural gas and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

Note: See back of page for A.13., A.14., A.15., and A.16.

PERMITTEE:

RES/Cedar Bay Inc.

Loganathan

Permit No. AC PSD-FL-137

County: Duval

11 10. Reporting for each CFB

testing

a. A minimum of thirty (30) days prior notification of compliance test shall be given to DEP's N.E. District office and to the BESD (Bio-Environmental Services Division) office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the BESD office within 45 days after completion of the test run.

c. The owner or operator shall submit excess emission reports to RESD → BESD, in accordance with ~~40 CFR 60~~ Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR §60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measured adopted (40 CFR §60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR §60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (60.7(c)(4)). (40 CFR

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (60.7(d)). (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to BESD as per F.A.C. Rule ~~17-2-700(7)~~ → ~~297.500~~ 297.500, F.A.C.

12 11. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-2.100 defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

DEP 212.200, F.A.C.

Note: 4b. on back of page

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PERMITTEE: *Cogeneration*  
AES/Cedar Bay Inc.

Permit No. AC PSD-YL-137  
County: Duval

*CBCP*  
B. ~~AES~~ - Material Handling and Treatment

1. The material handling and treatment operations may be continuous, ~~i.e. 8760 hrs/yr.~~ *see back of previous page*

2. The material handling/usage rates shall not exceed the following: *for coal, limestone, fly ash, and bed ash*

Material	Handling/Usage Rate	
	TPM	TPY
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr, ~~2,100,000~~ *and 700,800* gals/year for the limestone dryers; and 8000 gals/hr, ~~180,000~~ *and 1,900,000* gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. ~~The maximum emissions from the material handling and treatment area, where baghouses are used as controls for specific sources, shall not exceed those listed below (based on AP-43 factors):~~ Sources with either fabric filter or baghouse controls are as follows: *(see back of page for list)*

Source	Particulate Emissions	
	lbs/hr	TPY
<del>Coal Rail Unloading</del>	<del>neg</del>	<del>neg</del>
<del>Coal Belt Feeder</del>	<del>neg</del>	<del>neg</del>
<del>Coal Crusher</del>	<del>0.41</del>	<del>1.78</del>
<del>Coal Belt Transfer</del>	<del>neg</del>	<del>neg</del>
<del>Coal Silo</del>	<del>neg</del>	<del>neg</del>
<del>Limestone Crusher</del>	<del>0.06</del>	<del>0.28</del>
<del>Limestone Hopper</del>	<del>0.01</del>	<del>0.03</del>
<del>Fly Ash Bin</del>	<del>0.02</del>	<del>0.10</del>
<del>Bed Ash Hopper</del>	<del>0.06</del>	<del>0.25</del>
<del>Ash Silo</del>	<del>0.06</del>	<del>0.25</del>
<del>Canon Feed Hopper</del>	<del>0.03</del>	<del>0.13</del>
<del>Ash Unloader</del>	<del>0.01</del>	<del>0.06</del>

The emissions from the above listed sources and the limestone dryers are subject to the particulate emission limitation requirement of 0.03 gr/dscf. However, neither DER nor DESD will require particulate tests in accordance with EPA Method 5 unless the

*(Applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the*

0.003

*0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991) version*

PERMITTEE: <sup>Co-generation</sup>  
AES/Cedar Bay Inc.

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County: Duval

~~VE limit of 5% opacity is exceeded for a given source, or unless DER or RESD, based on other information, has reason to believe the particulate emission limits are being violated.~~

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area, ~~in accordance with F.A.C. Chapter 17-2~~ (see back of page)

7.8. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	Estimated Limitations					
	lbs/hr		TPY		TPY for 2 dryers	
PM/PM <sub>10</sub>	<del>0.25</del>	0.24	<del>1.1</del>	0.32	<del>2.2</del>	0.64
SO <sub>2</sub>	<del>5.00</del>	0.85	<del>21.9</del>	1.15	<del>43.8</del>	2.3
CO	0.60		<del>2.8</del>	0.81	<del>5.2</del>	1.62
NOx	2.40		<del>10.5</del>	3.25	<del>21.0</del>	6.5
VOC	0.05		<del>0.2</del>	0.06	<del>0.4</del>	0.12

Visible emissions from the dryers shall not exceed 5% opacity. ~~If natural gas is used, emissions limits shall be determined by factors contained in AP-42 Table 1, 4-1, Industrial 10/86.~~

8.7. The maximum <sup>sulfur content of</sup> No. 2 fuel oil firing rate <sup>should not exceed 0.05% by weight. The maximum</sup> for each limestone dryer shall not exceed 120 gals/hr, or ~~1,050,000~~ gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr, and ~~2,100,000~~ gals/year, for the two dryers. <sup>350,400</sup> <sup>700,800</sup>  
~~The maximum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MMCF per year.~~

9.8. Initial and annual <sup>PM and</sup> Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1988 version of 40 CFR 60, using EPA Methods, ~~and~~ <sup>Appendix A,</sup> <sup>and 9,</sup> respectively.

10.8. Compliance test reports shall be submitted to ~~RESD~~ <sup>RESD</sup> within 45 days of test completion in accordance with ~~Chapter 17-2.700(7) of the F.A.C.~~ <sup>1991</sup> Rule 17-297.570 of the F.A.C.

11.10. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-2.100, defining modification, shall be submitted for approval to ~~DER~~ <sup>DER</sup>'s Bureau of Air Regulation (BAR).

DEP 212.200

PERMITTEE: *Loganathan*  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

C. Requirements For the Permittees

DEP

CBCP

RESID

1. Beginning one month after certification, ~~AESCB~~ shall submit to ~~RESID~~ and ~~DER~~'s BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

CBCP

2. ~~The permittees~~ shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the ~~RESID~~ office. RESID

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees. CBCP. CBCP is subject to all applicable provisions of Rule 17-246.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

CBCP

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed ~~0.3~~ <sup>0.05</sup> percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of ~~two~~ years to be available for ~~DER~~ and ~~RESID~~ inspection.

RESID

on a shipment (train load) basis. three

DEP

1.7

6. Coal fired in the CFBs shall have a sulfur content not to exceed ~~1.2~~ percent by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

CBCP

7. ~~AESCB~~ shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

CBCP

8. ~~The permittees~~ shall provide stack sampling facilities as required by Rule ~~17-2.700(4)~~ F.A.C. 17-297.345 F.A.C.

9. Prior to commercial operation of each source, the permittee shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

PERMITTEE: *Co-generation*  
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D. Contemporaneous Emission Reductions

*shall*  
~~This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that~~ *CRCP*  
The following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, \* upon completion of the initial compliance tests on the ~~AESCB~~ boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. *BESD* ~~BESD~~ shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

Issued this 28th day  
of March, 1992 3

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION  
PROTECTION

*Carol M. Browner*  
Carol M. Browner, Secretary

\* within 30 days of written confirmation by DEP of the successful

**ENCLOSURE 3**

**THE PROPOSED REVISED AIR PERMIT**

**PERMITTEE:**

Cedar Bay Cogeneration, Inc.  
7475 Wisconsin Avenue  
Bethesda, MD 20814-3422

Permit Number: PSD-FL-137  
County: Duval  
Latitude: 30°25'21"N  
Longitude: 81°36'23"W  
Project: Cedar Bay  
Cogeneration Project

This air permit is issued for the Cedar Bay Cogeneration Project (CBCP) under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code (FAC) Chapters 17-210 through 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

This permit is for the installation of the CBCP, an integrated cogeneration power plant complex at the Seminole Kraft Corporation facility located in Jacksonville, Florida. The power complex will consist of three circulating fluidized bed (CFB) boilers whose principal fuel will be coal; the respective coal, ash, and other material handling equipment; a cooling tower; and limestone dryers, to be owned by Cedar Bay Cogeneration, Inc.

The three CFB boilers, permitted to input heat at the rate of 3,189 MMBtu/hr., will burn fuel made up of largely or exclusively coal with the possibility that two CFBs will fire some short fiber recycle rejects from their steam host. The boilers will generate steam to produce power from a turbine generator set. The cogeneration facility will generate electricity for sale to Florida Power & Light as well as process steam for the Seminole Kraft Corporation.

Nitrogen oxides will be controlled by selective non-catalytic reduction and good combustion characteristics which are an inherent part of the CFB technology. Sulfur dioxide will be controlled by limiting the average annual sulfur content of coal to 1.2% and the inherent limestone scrubbing provided by the CFB technology. Particulates will be controlled with fabric filters.

Construction shall be in accordance with the permit application and additional information submitted except as otherwise noted in the Specific Conditions.



Attachments:

1. Power plant site certification package PA 88-24 and its associated attachments, dated January 19, 1990.
2. Letter from EPA dated March 27, 1991.
3. DER's Final Determination dated March 28, 1991.
4. Settlement Stipulation, Dated April 13, 1993, In re: Power Plant Site Certification of Cedar Bay Cogeneration Project, PA-88-24, DOAH Case No. 88-5740, OGC Case No. 88-1089.
5. Final Order Approving Modification of Certification, Dated May 11, 1993, In Re: Power Plant Site Certification of Cedar Bay Cogeneration Project, PA-88-24, DOAH Case No. 88-5740, OGC Case No. 88-1089.
6. DEP's Final Determination dated \_\_\_\_\_, 1993.

I. GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsection 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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 of 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 any 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 proscribed by Sections 403.73 and 403.111, Florida 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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- a. Determination of Best Available Control Technology (BACT)
- b. Determination of Prevention of Significant Deterioration (PSD)
- c. Compliance with New Source Performance Standards and with New Source Review for Non-attainment

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 for 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 rules.
- 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.

## II. SPECIFIC CONDITIONS:

The construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions as indicated.

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the Seminole Kraft recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

d. The sulfur content of the coal shall not exceed 1.2% by weight on an annual basis. The sulfur content shall not exceed 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with No. 2 fuel oil with a maximum sulfur content of 0.05% by weight. The fuel oil shall normally only be used for startups. During commercial operation the maximum annual oil usage shall not exceed 1,900,000 gals./year. The maximum heat input from the fuel oil shall not exceed 380 MMBtu/hr. for each of the CFBs.

f. The CFBs shall be fueled only with the fuels permitted in Conditions II.A.1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DEP pursuant to Condition II.A.12 and B.11.

g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed  $25.98 \times 10^6$  MMBtu/yr total annual heat input.

h. To the extent that it is consistent with Condition II.A.1b. and the following, CBCP shall burn all of the short fiber rejects generated by Seminole Kraft in processing recycled paper. No less than ninety (90) days prior to completion of construction, CBCP shall submit a plan to DEP for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage

contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DEP and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DEP and to the RESD within forty-five (45) days of completion of the test burn. DEP shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this Condition.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.
- c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.
- d. Selective Non-catalytic Reduction (SNCR) for control of  $\text{NO}_x$ .
- e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

3. Flue gas emissions from each CFB shall not exceed the following:

<u>Pollutant</u>	<u>lbs/MMBtu</u>	<u>lbs/hr.</u>	<u>Emission Limitations</u>	
			<u>TPY</u>	<u>TPY for 3 CFBs</u>
CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758	2273
NO <sub>x</sub>	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--	--
	0.20 <sup>4</sup>	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> SO <sub>4</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.01	0.04	0.11

[Note: TPY represents a 93% capacity factor.]

- (1) Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when 1-hour standard applies.
- (2) Thirty-day rolling average.
- (3) Three-hour rolling average.
- (4) Twelve-Month rolling average (MRA).

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub> and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMS) identified in Condition No. II.A.9.

7. The CFBs are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NO<sub>x</sub>, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel.

e. The following test methods and procedures of Rule 17-297, F.A.C., and 40 CFR Parts 60 and 61 or other DEP approved methods with prior DEP approval, in writing, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.



- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (14) Method 18 or 25 for VOCs.
- (15) Method 101A or EPA Method 29 for mercury.
- (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM<sub>10</sub> emissions.
- (18) Ammonia (NH<sub>3</sub>) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C.; Chapter 17-297, F.A.C.; 40 CFR 60 Subpart A; 40 CFR 60 Subpart Da; 40 CFR 60 Appendix B; and 40 CFR 60 Appendix F. These CEMS shall be used to determine compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

a. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown and malfunction.

b. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

d. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. II.A.11 herein, which exceeds the applicable emission limit in Condition No. II.A.3.

f. The permittee is subject to all applicable provisions of Rule 17-4.130, Plant Operation-Problems.

#### 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

b. All coal and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

#### 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to DEP's N.E. District office and to the RESD office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., and 1,900,000 gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor
- Limestone Pulverizer/Conveyor
- Limestone Storage Bin
- Bed Ash Hopper
- Bed Ash Silo
- Fly Ash Silo
- Bed Ash Bin
- Fly Ash Bin
- Pellet Vibratory Screen
- Pelletizing Ash Recycle Tank
- Pelletizing Recycle Hopper

Cured Pellet Recycle Conveyor  
Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading  
Ash Pellet Hydrator  
Ash Pellet Curing Silo  
Ash Pelletizing Pan

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Condition II.B.4., in accordance with Rule 17-296.711(2)(a), F.A.C. After the compliance tests have been performed, neither DEP nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DEP or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.

7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	lbs/hr.	Estimated Limitations	
		TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.24	0.32	0.64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO <sub>x</sub>	2.40	3.25	6.5
VOC	0.05	0.06	0.12

Visible emissions from the dryers shall not exceed 5% opacity.

8. The maximum sulfur content of No. 2 fuel oil shall not exceed 0.05% by weight. The maximum firing rate of No. 2 fuel oil for each limestone dryer shall not exceed 120 gals/hr., or 350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and 700,800 gals/year, for the two dryers.

9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

10. Compliance test reports shall be submitted to RESD within 45 days of test completion in accordance with Rule 17-297.570 of the F.A.C.

11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation (BAR).

#### C. Requirements For the Permittees

1. Beginning one month after certification, CBCP shall submit to RESD and DEP's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

2. CBCP shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the RESD office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by CBCP. CBCP is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any CBCP unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.05 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value.

Records of the analyses shall be kept a minimum of three years to be available for DEP and RESD inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. CBC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. CBCP shall provide stack sampling facilities as required by Rule 17-297.345 F.A.C.

9. Prior to commercial operation of each source, the permittee shall submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

D. Contemporaneous Emission Reductions

The following Seminole Kraft Corporation sources shall be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DEP of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

Issued this \_\_\_\_ day  
of \_\_\_\_\_, 199\_

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
\_\_\_\_\_, Secretary



**Attachment 1**

**Power plant site certification package PA 88-24  
and its associated attachments  
Dated January 19, 1990.**

**Available Upon Request**

Attachment 2

Letter from EPA dated March 27, 1991

**Attachment 3**

**DER's Final Determination dated March 28, 1991**

Attachment 4

IN RE:  
POWER PLANT SITE CERTIFICATION  
OF CEDAR BAY COGENERATION  
PROJECT, PA-88-24

DOAH Case No. 88-5740  
OGC Case No. 88-1089

Settlement Stipulation

Dated April 13, 1993

Available Upon Request

Attachment 5

IN RE:  
POWER PLANT SITE CERTIFICATION  
OF CEDAR BAY COGENERATION  
PROJECT, PA-88-24

DOAH Case No. 88-5740  
OGC Case No. 88-1089

FINAL ORDER APPROVING MODIFICATION OF CERTIFICATION

Dated May 11, 1993

Available Upon Request

**Attachment 6**

**DEP's Final Determination dated August \_\_, 1993.**

**Final Determination**

**Cedar Bay Cogeneration Inc.  
Cedar Bay Cogeneration Project  
Duval County, Florida**

**Permit No. PSD-FL-137**

**Florida Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation**

**August \_\_, 1993**

## Final Determination

Air Permit PSD-FL-137 was issued to the Cedar Bay Cogeneration Project (the Project) of AES/Cedar Bay, Inc. on March 28, 1991, following review by the Division of Air Resources Management of the permit application (part of the Power Plant Siting application) and following certification by the Governor and Cabinet siting as the Siting Board under the Power Plant Siting Act. That permit was issued based on a demonstration by the applicant that the Project would satisfy the requirements of all applicable air regulations.

After questions were raised about the applicant's intention to construct and operate the Project in conformance with the conditions of certification (and of the Air Permit) and appropriate findings were made, the Siting Board instituted proceedings under the Power Plant Siting Act to modify the conditions of certification for the Project. AES Cedar Bay, Inc., and Seminole Kraft Corporation v. State of Florida Department of Environmental Regulation, DOAH Case No. 88-5740. Those proceedings culminated in the execution of a Settlement Stipulation on April 13, 1993, by the Parties in the modification proceedings which included the Florida Department of Environmental Protection (DEP). In that Settlement Stipulation (Attachment 4 to the revised Air Permit), the Parties agreed to recommend to the Siting Board that it modify the Conditions of Certification for the Project to include, among other things, more stringent emission limitations. On May 11, 1993, the Siting Board followed that recommendation and adopted an order modifying the conditions of certification.

Paragraph 23 of that Settlement Stipulation calls for amendment of the Air Permit for the Project to reflect the modifications that are applicable to the Project's Air Permit. According to ¶ 23 of the Settlement Stipulation, only the modifications recommended for the Conditions of Certification in ¶¶ 4 and 6 of the Settlement Stipulation should not be included in the amended Air Permit for the CBCP, since those conditions are not applicable to that Permit.

Consistent with the terms of the Settlement Stipulation and in response to a request by the permittee, the CBC, Inc. (the new corporate name for the permittee), DEP has determined that the Air Permit should be revised to reflect the changes noted in the Settlement Stipulation. Accordingly, DEP is recommending to EPA that it officially revise the Air Permit to incorporate these changes.

The key technical changes to the Air Permit, which will result in substantial emission reductions from the Project, are as follows:

- A. Lower the limitations applicable to the emissions from the circulating fluidized bed boilers (CFBs) of SO<sub>2</sub>, NO<sub>x</sub>, CO, PM, PM-10, H<sub>2</sub>SO<sub>4</sub>, fluorides, lead, mercury, and beryllium consistent with the Conditions of Certification.



1. The restrictions on the sulfur content of the coal fired in the CFBs have been tightened, and the CBC will make operational changes in the limestone injection system to comply with the lower emission limitations for SO<sub>2</sub> and other acid gases.
  2. SNCR will be added to the CBCP to augment the low NO<sub>x</sub> performance of the CFBs, and an emission limitation for ammonia has been added.
  3. Enhanced combustion management will achieve lower CO emissions.
  4. Operational changes have been incorporated for the flue gas fabric filters to achieve lower PM emission limitations.
  5. Lower emission limitations are now possible for trace elements with this improved baghouse performance and revised emission factors.
  6. New technologies will be tested for additional mercury removal.
- B. Provide for compliance with the CFBs' opacity requirements and emission limitations for SO<sub>2</sub>, CO, and NO<sub>x</sub> to be determined using Continuous Emission Monitors as well as stack tests.
- C. Include permission for --
1. Two of the CFBs to burn short fiber recycle rejects from Seminole Kraft Corporation (SKC).
  2. The CFBs to operate at a furnace heat load below 70%.
  3. An increase in the use of fuel oil during the CFBs' start-ups from 0.16 million gpy to 1.9 million gpy.
  4. Reduce the allowable sulfur content of the fuel oil used in the CFBs during start-up to 0.05% by weight.
- D. For the limestone dryers --
1. Decrease their allowable hours of operation.
  2. Reduce the allowable sulfur content of the fuel oil used in them to 0.05% by weight.

- E. For other sources in the material handling and treatment area --
1. Reduce the allowable grain loadings by a factor of 10 for the point sources controlled with baghouses and by a factor of 3 for the point sources controlled with wet control systems.
  2. Rely on compliance tests based on visible emissions and grain loadings.

This recommendation is also based on the DEP findings that these emission reductions will in turn reduce the air quality impacts from the Project. In February of this year, ENSR submitted to DEP its "CBCP Air Quality Analysis;" and in March of this year, a number of replacement pages for this report were filed with DEP. ENSR's work shows (1) regional improvements in air quality with respect to the CBCP as originally certified and with respect to SKC's existing power and bark boilers, and (2) some increment expansions in the CBCP's significant impact area. These comparisons hold even when SKC's new package boilers are added to the impacts of the CBCP.

Accordingly, and as DEP reported in its March 25, 1993 staff report on the Project, the Project complies with all air quality requirements. Specifically, the CBCP will continue to comply with applicable PSD requirements: (1) the control technology planned for the CBCP will satisfy BACT requirements for all pollutants subject to new source review; (2) the emissions from the CBCP will not cause or contribute to a violation of the ambient standards or the PSD increments; (3) the CBCP will not have an adverse impact on the air quality related values of any class I area; (4) the CBCP will not adversely affect visibility, soils, or vegetation having significant commercial or recreational value; and (5) analyses show that any growth associated with the CBCP will not have significant air quality impacts.

Similarly, ENSR's Report indicates that the Project clearly continues to comply with applicable ozone nonattainment requirements: (1) the Project will satisfy the LAER requirement for VOCs; (2) the Project's VOC emissions will be more than offset by the shutdown of SKC's bark and power boilers; and (3) these offsets will result in a net air quality benefit. Finally, CBC, Inc. does not have any sources in Florida that are out of compliance with their air quality requirements; and Florida has an effective SIP for ozone.

That the Project satisfies all applicable requirements is also reflected in ¶ 2 of the Settlement Stipulation and in the final action taken by the Siting Board on the Conditions of Certification for the CBCP on May 11, 1993.

Under EPA's guidance on permit modifications, changes that do not involve increases in source emissions or in air quality impacts may be considered permit "amendments," which may be accomplished through simple administrative action without further public review or proceedings. (United States Environmental Protection Agency, Office of Air Quality Planning

and Standards, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985) at p. 11.) No increases in emissions or air quality impacts will occur for the Project. Accordingly, DEP finds that there is no need for public notice or comment prior to DEP's recommendation or to EPA's revising the Project's Air Permit consistent with the final determination.

**ENCLOSURE 4**

**DRAFT LETTERS FOR EPA**

[DEP LETTERHEAD]

August \_\_, 1993

Ms. Jewell Harper, Chief  
Air Enforcement Branch  
U.S. Environmental  
Protection Agency  
Region IV  
345 Courtland Street, N.E.  
Atlanta, GA 30065

RE: Amendment of Permit No. PSD-FL-137

Dear Ms. Harper:

Cedar Bay Cogeneration, Inc. has requested that the referenced permit for the Cedar Bay Cogeneration Project be amended to include the reduced emission limitations recently adopted by the Siting Board of the State of Florida when it modified the Project's certification under Florida's Power Plant Siting Act. These emission reductions and related changes are summarized in Enclosure 1 and are associated with improvements in the air quality around that Project. This request is consistent with the Settlement Stipulation agreed to by all the parties to the modification proceeding convened by Florida.

We have taken final action on the proposed revisions to the Project's air permit by finding it to be acceptable and by drafting the enclosed amendment to permit No. PSD-FL-137, to which is attached the Department's final determination that elaborates on this conclusion. To illustrate the specific changes to the Project's air permit that DEP is recommended, also enclosed is a marked-up version of the current permit. Because this facility is subject to Florida's Power Plant Certification regulations, we request that EPA also review and approve the enclosed draft amendment.

Sincerely,

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

HLR/CF/wmh

Enclosure

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Cogeneration, Inc.  
7475 Wisconsin Avenue  
Bethesda, MD 20814-3422

**Cedar Bay Cogeneration Project**  
**Permit No.: PSD-FL-137**

Dear Mr. Fickett:

EPA has completed its review of the record in the proceeding to modify the certification for the CBCP (the Project) issued under Florida's Power Plant Siting Act, as summarized in the August \_\_, 1993 letter from Clare Fancy to me, and your request for administrative changes to the conditions of the air permit (PSD-FL-137) issued to CBC, Inc -- the current name of AES/CB, Inc., the original permittee for the Project -- on March 28, 1991, for the Project. You requested that an array of General and Specific Conditions of the permit be revised to account for the improvements in ambient air quality associated with the emission reductions now required by the Project's modified certification. The bases of your request are that -- based on changes in fuels, control technologies, operational parameters, and related equipment and procedures -- the Project will be required to and can achieve lower emission rates and that the Settlement Stipulation entered into by the parties to the modification proceeding commits the Project to requesting the proposed revisions to the Air Permit.

Based on the foregoing, it is determined that the proposed revision to permit PSD-FL-137 is acceptable and will not result in the increase of any emission subject to the PSD regulations or of ambient impacts. As a result, the proposed revisions qualify as an administrative change and will not require additional public participation procedures.

Authority to construct a stationary source was granted for the Project, subject to the conditions contained in the permit to construct on March 28, 1991. The administrative change to PSD-FL-137 does not alter the commence construction deadline for the Project. This authority to construct is based solely on the requirements of EPA's air quality regulations and in no way affects approvals under other Federal or State regulatory authorities. Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, may subject CBC to enforcement action.

Any questions concerning this administrative permit revision may be directed to Mr. Winston A. Smith, Director, Air, Pesticides, and Toxics Management Division at (404) 347-3043.

Sincerely yours,

Patrick M. Tobin  
Acting Regional Administrator

Enclosures

cc: Mr. C. H. Fancy  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

PSD-FL-137

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE  
PROTECTION OF AMBIENT AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1, and Part D of the Clean Air Act, as amended, 42 U.S.C. § 7470 et seq. and 42 U.S.C. § 7480 et seq., and the regulations promulgated thereunder at 40 C.F.R. §§ 52.21 and 24 and § 51, Appendix S, as amended,

Cedar Bay Cogeneration, Inc.  
7475 Wisconsin Avenue  
Bethesda, MD 20814-3422

is hereby authorized to construct/modify a stationary source, specifically the Cedar Bay Cogeneration Project, at the following location:

Cedar Bay Cogeneration, Inc.  
Cedar Bay Cogeneration Project  
9640 Eastport Road  
Duval County, Florida

Latitude/Longitude:    30°25'21"N  
                                  81°36'23"W

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II) of its air permit.

The revisions to this permit shall become effective on the date signed below.

If construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

Date Signed

Patrick M. Tobin  
Acting Regional Administrator



Attachment 1  
(Available Upon Request)

Attachment 2



PM  
3-27-91  
Atlanta, Ga.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

4APT-AEB

MAR 27 1991

RECEIVED  
APR 1 1991  
DER-BAQM

Mr. Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Preliminary Determination for AES/Cedar Bay (PSD-FL-137)

Dear Mr. Fancy:

This is to acknowledge receipt of your preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the above referenced facility dated March 11, 1991. We have reviewed the package as requested and have the following comments.

Public Notice

The public notice submitted in the package was specifically for the Site Certification Process. The notice is dated February 5, 1990, with the Site Certification Hearing scheduled for February 5, 1990. This does not fulfil the 30 day notice and comment period requirement of Florida's PSD regulation which was approved pursuant to 40 CFR §51.162. Item 8 of the public notice requires that persons "wishing to intervene in these proceedings must be represented by an attorney or other person who can be determined to be qualified..." which is not consistent with the PSD regulation. Other notable items in the public notice are as follows:

1. The notice states that DER has been granted a delegation by EPA to carry out the PSD review process. As you know, Florida is a SIP approved state rather than a delegated state.
2. The increment consumption given in the notice of 0% for all pollutants and averaging times is misleading since it was based on the erroneous emissions netting between Seminole Kraft and AES/Cedar Bay. As detailed to you in our letter of November 14, 1989, and as acknowledged on page 33 of your preliminary determination, netting of emissions between Seminole Kraft and AESCB is not applicable. Thus, the increment consumption reported in the public notice is not correct.

BACT Analysis

The determination of BACT made by DER included combustion controls to limit NO<sub>x</sub> emissions and a SO<sub>2</sub> removal efficiency of 90% resulting in emission limits of 0.29 lb NO<sub>x</sub>/MMBTU and 0.31 lb SO<sub>2</sub>/MMBTU. These limits are higher than what is currently being permitted even for pulverized coal boilers. We believe that NO<sub>x</sub> add-on controls are technically feasible for this project and that SO<sub>2</sub> emissions could be reduced through the use of lower sulfur coal and through increasing the removal efficiency. However, due to the circumstances involved in this project, we will defer to the decision of DER for this project.

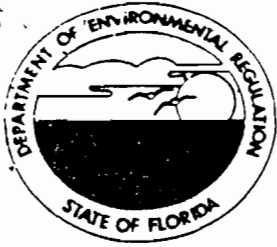
If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-2904.

Sincerely yours,



Winston A. Smith, Director  
Air, Pesticides, and Toxics  
Management Division

Attachment 3



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

March 28, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeff Swain  
AES/Cedar Bay Inc.  
1001 North 19th Street  
Arlington, Virginia 22209

Dear Mr. Swain:

Re: AES/Cedar Bay Inc.  
Cogeneration Project, PSD-FL-137

Please find enclosed the above referenced permit. You have the right to petition for an administrative hearing pursuant to Section 120.57, Florida Statutes, within 14 days of receipt of this permit or file a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within 30 days from the date this permit is filed with the Clerk of the Department. Further, you may request a public hearing. Such request must be submitted within 30 days of receipt of this permit.

If you have any questions, please call Barry Andrews at (904)488-1344 or write to me at the above address.

Sincerely,

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

CHF/kt

enclosure

cc: J. Harper, EPA  
A. Kutyna, NE District  
K. Kurts, BESD  
T. Cole, Oertel & Hoffman

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on 3-29-91.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Keri Baker  
Clerk

3-29-91  
Date

Final Determination

AES/Cedar Bay Inc.  
Cogeneration Project  
Duval County, Florida

Permit No: PSD-FL-137

Florida Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

March 28, 1991



## Final Determination

AES/Cedar Bay, Inc.'s PSD permit application (part of the Power Plant Siting application), has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated March 27, 1991 (see attachment 2) are addressed below.

### Public Notice

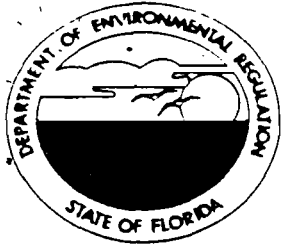
The EPA questioned why the notice was published on the same date that the Site Certification Hearing was scheduled to begin, thereby not providing a 30 day notice and comment period.

Notice was published originally on December 8, 1989, for a January 8, 1990 hearing. A copy of the proposed Notice was sent to Region IV on December 1, 1989 for review. No comments were received regarding the increment consumptions reflected in the Notice sent to EPA. The hearing was then postponed from January 8, 1990 to February 5, 1990. The hearing then had to be continued on February 20, 1990 for which the Notice was published on February 12, 1990. In addition, public access hearings were held on February 7, 1990 and February 21, 1990 for nonparty members of the public. The public always has the right to speak. Only if they intervene as a formal party do they need an attorney as required by Florida law.

### BACT Analysis

The Department agrees with EPA that add-on NOx controls are technically feasible for the AES/Cedar Bay project. The decision to establish the NOx limitation at 0.29 lb/MMBtu was based on the overall benefits that would be obtained from the construction of the cogeneration facility (the additional cost of SNCR would cause the project to become financially unfeasible). The circulating fluidized bed (CFB) boilers will replace older boilers which have higher emissions per heat input. In addition, the 0.29 lb/MMBtu limitation was judged to be the most stringent limitation placed on a coal fired boiler which does not have add-on NOx controls.

For sulfur dioxide, the Department evaluated the cost of switching to a lower sulfur coal and determined that such a cost was prohibitive. It should be noted that the decision to limit the average annual sulfur content to 1.7 percent is well below the initial proposal of 3.3 percent by the applicant. With regard to the control efficiency, the Department believes that 90 percent efficiency is reasonable for the CFB design.



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
**AES/Cedar Bay, Inc.**  
**1001 North 19th Street**  
**Arlington, VA 22209**

**Permit Number: PSD-FL-137**  
**County: Duval**  
**Latitude/Longitude: 30°25'21"N**  
**81°36'23"W**  
**Project: Cogeneration Project**

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an integrated cogeneration power plant complex at the Seminole Kraft Corporation facility located in Jacksonville, Florida. The power complex will consist of three coal/bark fired circulating fluidized bed (CFB) boilers, the respective coal handling equipment and limestone dryers, to be owned and operated by AES Cedar Bay, Inc.

The CFB boiler, rated at 3,189 MMBtu will burn fuel made up of approximately 96 percent coal and 4 percent bark. The boilers will generate steam to produce power from a turbine generator set. The cogeneration facility will generate 225 MW of electricity for sale to Florida Power & Light as well as low pressure process steam for the Seminole Kraft Corporation.

Nitrogen oxides will be controlled by the good combustion characteristics which are an inherent part of the CFB technology. Sulfur dioxide will be controlled by limiting the average annual sulfur content to 1.7% and the inherent limestone scrubbing provided by the CFB technology. Particulates will be controlled with fabric filters.

Construction shall be in accordance with the permit application and additional information submitted except as otherwise noted in the Specific Conditions.

#### Attachments:

1. Power plant site certification package PA 88-24 and its associated attachments, dated January 19, 1990.
2. Letter from EPA dated March 27, 1991.
3. DER's Final Determination dated March 28, 1991.

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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 of 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 acknowledgement 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.

PERMITTEE:  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

**GENERAL CONDITIONS:**

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 any 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 proscribed by Sections 403.73 and 403.111, Florida 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,

PERMITTEE:  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

**GENERAL CONDITIONS:**

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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards

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 for 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.

PERMITTEE:  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

**General Conditions:**

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.

**SPECIFIC CONDITIONS:**

1. The construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-2, F.A.C.. In addition to the foregoing, AESCB shall comply with the following conditions of certification as indicated.

A. Emission Limitations for AES Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr, 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr, 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum wood waste (primarily bark) charging rate to the No. 1 and No. 2 CFBs each shall neither exceed 15,653 lbs/hr, nor 63,760 TPY. This reflects a combined total of 31,306 lbs/hr, and 127,521 TPY for the No. 1 and No. 2 CFBs. The No. 3 CFB will not utilize woodwaste, nor will it be equipped with wood waste handling and firing equipment.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr for all three units.

d. The sulfur content of the coal shall not exceed 1.7% by weight on an annual basis. The sulfur content shall not exceed 3.3% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with natural gas or No. 2 fuel oil with a maximum sulfur content of 0.3% by weight. The fuel oil or natural gas shall be used only for startups. The maximum annual oil usage shall not exceed 160,000 gals/year, nor shall the maximum annual natural gas usage exceed 22.4 MMCF per year. The maximum heat input from the fuel oil or gas shall not exceed 1120 MMBtu/hr for the CFBs.

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f. The CFBs shall be fueled only with the fuels permitted in Conditions 1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to condition XXI, Modification of Conditions.

g. The CFBs may operate continuously, i.e, 8760 hrs/yr.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection, for control of sulfur dioxide.
- b. Baghouse, for control of particulate.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr	TPY	TPY for 3 CFBs
CO	0.19	202	823	2468
NOx	0.29	308.3	1256	3767
SO <sub>2</sub>	0.60 (3-hr avg.)	637.8	--	--
	0.31 (12 MRA)	329.5	1338	4015
VOC	<u>0.015</u>	<u>16.0</u>	<u>65</u>	<u>195</u>
PM	0.020	21.3	87	260
PM <sub>10</sub>	0.020	21.3	86	257
H <sub>2</sub> SO <sub>4</sub> mist	0.024	25.5	103	308
Fluorides	0.086	91.4	374	1122
Lead	0.007	7.4	30	91
Mercury	0.00026	0.276	1.13	3.4
Beryllium	0.00011	0.117	0.5	1.5

Note: TPY represents a 93% capacity factor. MRA refers to a twelve month rolling average.

4. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity.

5. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1988 version of 40 CFR Parts 60 and 61 and listed in Condition No. 7 of this permit or by equivalent methods after prior DER approval.

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6. The CFBs are subject to 40 CFR Part 60, Subpart Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.

7. Compliance Tests for each CFB

a. Initial compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, lead, fluorides, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, SO<sub>2</sub> and NO<sub>x</sub>, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate of each permitted fuel.

e. The following test methods and procedures of 40 CFR Parts 60 and 61 or other DER approved methods with prior DER approval shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11.
- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13B for fluorides.
- (13) Method 25A for VOCs.
- (14) Method 101A for mercury.
- (15) Method 104 for beryllium.



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8. Continuous Emission Monitoring for each CFB AESCB shall use Continuous Emission Monitors (CEMS) to determine compliance. CEMS for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, shall be installed, calibrated, maintained and operated for each unit, in accordance with 40 CFR 60.47a and 40 CFR 60 Appendix F.

a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.

b. CEMS data shall be recorded and reported in accordance with Chapter 17-2, F.A.C., and 40 CFR 60. A record shall be kept for periods of startup, shutdown and malfunction.

c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

e. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

f. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 10 herein, which exceeds the applicable emission limit in Condition No. 3.

9. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

b. The furnace heat load shall be maintained between 70% and 100% of the design rated capacity during normal operations.

c. The coal, bark, natural gas and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB.

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10. Reporting for each CFB

a. A minimum of thirty (30) days prior notification of compliance test shall be given to DER's N.E. District office and to the BESD (Bio-Environmental Services Division) office, in accordance with 40 CFR 60.

b. The results of compliance test shall be submitted to the BESD office within 45 days after completion of the test.

c. The owner or operator shall submit excess emission reports to BESD, in accordance with 40 CFR 60. The report shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (60.7(d)).

d. Annual and quarterly reports shall be submitted to BESD as per F.A.C. Rule 17-2.700(7).

11. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-2.100, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation.

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B. AES - Material Handling and Treatment

1. The material handling and treatment operations may be continuous, i.e. 8760 hrs/yr.
2. The material handling/usage rates shall not exceed the following:

Material	Handling/Usage Rate	
	TPM	TPY
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr, 2,100,000 gals/year for the limestone dryers; and 8000 gals/hr, 160,000 gals/year for the three boilers are not expected to be significant.

4. The maximum emissions from the material handling and treatment area, where baghouses are used as controls for specific sources, shall not exceed those listed below (based on AP-42 factors):

Source	Particulate Emissions	
	lbs/hr	TPY
Coal Rail Unloading	neg	neg
Coal Belt Feeder	neg	neg
Coal Crusher	0.41	1.78
Coal Belt Transfer	neg	neg
Coal Silo	neg	neg
Limestone Crusher	0.06	0.28
Limestone Hopper	0.01	0.03
Fly Ash Bin	0.02	0.10
Bed Ash Hopper	0.06	0.25
Ash Silo	0.06	0.25
Common Feed Hopper	0.03	0.13
Ash Unloader	0.01	0.06

The emissions from the above listed sources and the limestone dryers are subject to the particulate emission limitation requirement of 0.03 gr/dscf. However, neither DER nor BESD will require particulate tests in accordance with EPA Method 5 unless the

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AES/Cedar Bay Inc.

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VE limit of 5% opacity is exceeded for a given source, or unless DER or BESD, based on other information, has reason to believe the particulate emission limits are being violated.

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area, in accordance with F.A.C. Chapter 17-2.

6. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	lbs/hr	Estimated Limitations	
		TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.25	1.1	2.2
SO <sub>2</sub>	5.00	21.9	43.8
CO	0.60	2.6	5.2
NOx	2.40	10.5	21.0
VOC	0.05	0.2	0.4

Visible emissions from the dryers shall not exceed 5% opacity. If natural gas is used, emissions limits shall be determined by factors contained in AP-42 Table 1. 4-1, Industrial 10/86.

7. The maximum No. 2 fuel oil firing rate for each limestone dryer shall not exceed 120 gals/hr, or 1,050,000 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr, and 2,100,000 gals/year, for the two dryers.

The maximum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MCF per year.

8. Initial and annual Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1988 version of 40 CFR 60, using EPA Method 9.

9. Compliance test reports shall be submitted to BESD within 45 days of test completion in accordance with Chapter 17-2.700(7) of the F.A.C.

10. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-2.100, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation (BAR).

PERMITTEE:  
AES/Cedar Bay Inc.

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C. Requirements For the Permittees

1. Beginning one month after certification, AESCB shall submit to BESD and DER's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.
2. The permittees shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the BESD office.
3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees.
4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.
5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.3 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of two years to be available for DER and BESD inspection.
6. Coal fired in the CFBs shall have a sulfur content not to exceed 3.3 percent by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.
7. AESCB shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.
8. The permittees shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.
9. Prior to commercial operation of each source, the permittees shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

PERMITTEE:  
AES/Cedar Bay Inc.

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D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, upon completion of the initial compliance tests on the AESCB boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. BESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

Issued this 28th day  
of March, 1991

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
Carol M. Browner, Secretary

Attachment 1  
Available Upon Request

Attachment 2





BEST AVAILABLE COPY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

4APT-AEB MAR 27 1991

Mr. Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Preliminary Determination for AES/Cedar Bay (PSD-FL-137)

Dear Mr. Fancy:

This is to acknowledge receipt of your preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the above referenced facility dated March 11, 1991. We have reviewed the package as requested and have the following comments.

Public Notice

The public notice submitted in the package was specifically for the Site Certification Process. The notice is dated February 5, 1990, with the Site Certification Hearing scheduled for February 5, 1990. This does not fulfill the 30 day notice and comment period requirement of Florida's PSD regulation which was approved pursuant to 40 CFR §51.162. Item 8 of the public notice requires that persons "wishing to intervene in these proceedings must be represented by an attorney or other person who can be determined to be qualified..." which is not consistent with the PSD regulation. Other notable items in the public notice are as follows:

1. The notice states that DER has been granted a delegation by EPA to carry out the PSD review process. As you know, Florida is a SIP approved state rather than a delegated state.
2. The increment consumption given in the notice of 0% for all pollutants and averaging times is misleading since it was based on the erroneous emissions netting between Seminole Kraft and AES/Cedar Bay. As detailed to you in our letter of November 14, 1989, and as acknowledged on page 33 of your preliminary determination, netting of emissions between Seminole Kraft and AESCB is not applicable. Thus, the increment consumption reported in the public notice is not correct.

-2-

BACT Analysis

The determination of BACT made by DER included combustion controls to limit NO<sub>x</sub> emissions and a SO<sub>2</sub> removal efficiency of 90% resulting in emission limits of 0.29 lb NO<sub>x</sub>/MMBTU and 0.31 lb SO<sub>2</sub>/MMBTU. These limits are higher than what is currently being permitted even for pulverized coal boilers. We believe that NO<sub>x</sub> add-on controls are technically feasible for this project and that SO<sub>2</sub> emissions could be reduced through the use of lower sulfur coal and through increasing the removal efficiency. However, due to the circumstances involved in this project, we will defer to the decision of DER for this project.

If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-2904.

Sincerely yours,



Winston A. Smith, Director  
Air, Pesticides, and Toxics  
Management Division

Attachment 4



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
75 Spring Street, S.W.  
Atlanta, Georgia  
30303

December 24, 1992

RECEIVED

DEC 28 1992

Division of Air  
Resources Management

Mr. C. H. Fancy  
Chief, Bureau of Air Regulation  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

We have reviewed the November 1992 Cedar Bay Cogeneration Project (CBCP) Air Quality Analysis that ENSR prepared to support the proposed modification of the CBCP Power Plant Site Certification (PPSC) issued on February 11, 1991. We appreciate having an opportunity to comment on this project. As you know, the proposed CBCP would be located near Jacksonville, approximately 45 km southeast of the Okefenokee Wilderness Area (WA) and 90 km southwest of the Wolf Island WA, both Class I air quality areas administered by the Fish and Wildlife Service. We understand that the modification would include the installation of better control technology on the CBCP boilers, resulting in a decrease in proposed emissions from the facility as currently certified.

ENSR's analysis shows that emissions from the CBCP as proposed to be modified, combined with the three recently proposed boilers for the Seminole Kraft Corporation (SKC) in Jacksonville, would be lower than either the CBCP as certified, or the existing SKC boilers and auxiliary equipment as they would be operated if the CBCP were not constructed. We are pleased to see that the proposed modification should result in an environmental benefit for the region. However, we believe that emissions could be reduced even further than those proposed in the modification.

We agree that selective noncatalytic reduction to control nitrogen oxide emissions, and circulating fluidized bed and fabric filtration to control sulfur dioxide (SO<sub>2</sub>) emissions represent best available control technology; however, we believe better SO<sub>2</sub> emission rates than those proposed can be achieved. For example, the 0.24 pounds per million Btu (lb/MMBtu) 3-hour average rate proposed in ENSR's analysis is less stringent than the recently permitted Keystone Cogeneration project in New Jersey (0.16 lb/MMBtu, 1-hour average) or the proposed Indiantown Cogeneration project in Florida (0.17 lb/MMBtu, 1-hour average).

Best Available Copy

Therefore, to be consistent with other recently proposed and permitted projects, we recommend that the SO<sub>2</sub> emission limits for the CBCP be lowered accordingly.

ENSR performed SO<sub>2</sub> and nitrogen dioxide Prevention of Significant Deterioration (PSD) increment analyses for the Okefenokee and Wolf Island WAS, but they failed to assess potential effects of emissions from the CBCP on air quality related values in the Class I areas. Using the information provided in the Air Quality Analysis, we performed a visibility analysis for the closest area, the Okefenokee WA. Our modeling results show that both the CBCP as certified and the CBCP as proposed to be modified fail the conservative Level 1 VISCREEN analysis. However, we also performed a Level 2 analysis on the CBCP as proposed to be modified, and the results indicate that the facility would have low potential to cause visibility impairment due to plumes in the Okefenokee WA.

While we still recommend lower SO<sub>2</sub> emission limits to further reduce emissions from the CBCP, based on the overall emission reductions, ENSR's Class I increment analyses, and our visibility analyses, we support the current proposal to modify the facility as certified. However, because the net environmental benefit described in ENSR's analysis is contingent upon SKC's 5 existing boilers and auxiliary equipment (e.g. recovery boilers, lime kilns, and smelt dissolving tanks) being shut down once the CBCP begins operation, we recommend that the modified PPSC and PSD permit contain permit conditions detailing the required shut down of the existing equipment.

We ask that you send us copies of the State's preliminary determinations for the modified PPSC and PSD permit when they become available. In the meantime, if you have any questions regarding this matter, please contact Tonnie Maniero of our Air Quality office in Denver at 303/969-2071.

Sincerely yours,



James W. Pulliam, Jr.  
Regional Director

cc: M. Finney  
B. Mitchell  
T. C. ...  
A. Kautzman  
K. ...  
... EPA  
...  
...

Attachment 5

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STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC., and  
SEMINOLE KRAFT CORPORATION,

Petitioners,

vs.

DOAH CASE NO. 88-5740

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION,

Respondent,

and

CITY OF JACKSONVILLE,  
DEPARTMENT OF COMMUNITY AFFAIRS,  
PUBLIC SERVICE COMMISSION, ST.  
JOHNS RIVER WATER MANAGEMENT  
DISTRICT, JACKSONVILLE ELECTRIC  
AUTHORITY, CHARLES W. BOSTWICK,  
WILLIAM C. BOSTWICK, BARNETT  
BANKS TRUST COMPANY, N.A., IMESON  
INTERNATIONAL PARK, INC., and  
INDUSTRIAL PARK DEVELOPMENT  
CORPORATION, CITIZENS COMMITTEE,  
INC., SIERRA CLUB, FLORIDA  
AUDUBON SOCIETY, THE DUVAL  
AUDUBON SOCIETY, INC., and  
STAFFORD CAMPBELL,

Intervenors.

SETTLEMENT STIPULATION

The parties in this and related proceedings, Cedar Bay Cogeneration, Inc. ("CBC") (formerly known as AES Cedar Bay, Inc.), Seminole Kraft Corporation ("SK"), the Florida Department of Environmental Regulation ("DER"), St. Johns River Water Management District ("SJRWMD"), City of Jacksonville, the Citizens' Committee, Inc. (including all of its members, who are listed on Attachment A

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hereto), William C. Bostwick, Sierra Club, Florida Audubon Society, The Duval Audubon Society, Inc., and Stafford Campbell, as indicated below by their signatures or the signatures of their counsel or representatives (collectively "the Parties"), enter into the following settlement stipulation and agreement (Agreement), which shall be binding on themselves and their members, principals, successors and assigns. Persons signing on behalf of a group, organization, or legal entity represent that they have all necessary power and authority to execute this agreement and to bind said group, organization, or legal entity and its members.

**A. Purposes**

1. The intent of this Agreement is to resolve fully and finally, and with prejudice, all disputes, issues or other matters arising in the above-styled proceeding and in all related permitting proceedings or appeals at the federal, state, regional and local levels arising out of, or related to, the certification of, the petition for modification of certification of, or the permitting of, the Cedar Bay Cogeneration Project ("CBCP" or "Project") and its construction and operation in a manner binding on the parties to this Agreement. This Agreement resolves all issues which were raised or could have been raised in this proceeding or any other proceeding, including but not limited to the issue of use of natural gas in the Project or the Project's satisfaction of federal, state, regional and local environmental or other regulations. The parties will not seek administrative or judicial review, or seek revocation of, any certification or permit



for the Project which is consistent with the terms of this Agreement. This Agreement neither waives nor expands the rights available to any Party under existing law to seek enforcement or any other remedy for violation of this Agreement, the conditions of certification, or any state or federal permit for facts occurring after the date of this Agreement.

2. Each Party hereby requests, intending to be bound by its individual execution of this Agreement, that the Florida Power Plant Siting Board (Siting Board) enter a Final Order Approving Modification of Site Certification that contains the Conditions of Certification attached hereto as Attachment B and the provisions of this Agreement contained in Paragraphs 3 through 6 inclusive. All other provisions of this Agreement which are not included in the modified certification or other related permit shall be independently binding on the parties hereto. Furthermore, the parties agree that the findings implicit and explicit in this document establish that, if operated in compliance with the certification and applicable permits, the CBCP as now proposed plus the package boilers now proposed by SKC fully satisfy the Florida Electrical Power Plant Siting Act, all applicable federal, state, regional and local environmental requirements, and the Siting Board's Order Initiating Modification Proceedings, dated June 17, 1992, and are associated with, "[o]n balance," fewer "environmental impacts" than are associated with the SKC recycling operation without the CBCP as now proposed.

B. Conditions of Certification

3. A revised Condition of Certification No. XXVIII shall be included in the Conditions of Certification as contained in Attachment C hereto.

4. An additional condition of certification No. II.A.8.c. shall be included in the Conditions of Certification, as follows:

Compliance tests shall be performed for mercury (Hg), beryllium (Be), and lead (Pb) until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in Condition II.A.3. above. Such tests shall occur, as necessary, in the first, fifth and tenth years and additional successive five year intervals following commercial operation of the Project.

5. Revised Conditions of Certification No. II.A.6 and II.A.9. to address the use of Continuous Emissions Monitors for determining compliance with emissions limits for sulfur dioxide, nitrogen oxides, carbon monoxide and opacity shall be included in the Conditions of Certification, as follows:

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMs) identified in Condition No. II.A.9.

9. CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. These CEMs shall be used to determine compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with the opacity

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requirements in Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

6. Revised Conditions of Certification II.D. and II.E. to address Seminole Kraft Corporation's annual emissions from its new package boilers and actions to dismantle or render inoperable SK's existing power and bark boilers following surrender of the air permits for those boilers shall be included in the Conditions of Certification as follows:

D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under section 403.509, F.S., shall require that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. Within one year of surrender of operating permits as provided above, SK shall have completed the following steps to ensure compliance with this condition:

Remove all oil guns;

Remove motors and selected conveyor parts in wood feed system for bark boilers;

Dismantle stacks;

Disconnect boiler feedwater pumps;

Sever fuel line connections; and

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Remove fan motors.

These sources shall not, under any circumstances, be restarted, refurbished or re-permitted as new or existing sources, at the SK or CBCP site.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

E. SK Steam Boiler Emissions

1. This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, Florida Statutes, shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr. of steam for use in its recycled paper process:

	Tons Per Year
CO	553
NO <sub>x</sub>	310
SO <sub>2</sub>	25, except as provided in E.2 below.

2. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein; and emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within Seminole Kraft's control. In no event shall the annual emissions of SO<sub>2</sub> from the steam boilers referenced above exceed a ceiling of 41 tons per year.

3. The notice shall include a statement of reasons for the request and supporting documentation, and shall be published by SK, without supporting documents, in a newspaper of general circulation in Jacksonville as defined in section 403.5115(2), Florida Statutes. The filing and publication of the notice no later than 7 days following the date of exceedance shall preclude any finding of violation by DER until final disposition of any administrative proceedings.

C. Other Environmental Provisions

7. As an incentive to achieve lower sulfur dioxide emissions than permitted under the Conditions of Certification, CBC shall pay

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annually to the City of Jacksonville, Land Acquisition Trust Fund, \$400 for each ton of sulfur dioxide emitted in excess of 2208 tons per calendar year from the CBCP's three circulating fluidized bed boilers, combined, up to the total annual permitted sulfur dioxide emissions for the Project; provided, however, that any taxes, charges or fees payable under an applicable regulatory program on account of emissions above 2208 tons per year but below the maximum permitted annual emissions shall be deducted from the \$400 per ton payable under this provision. The annual sulfur dioxide emissions from the CBCP's CFB boilers for purposes of this provision shall be determined based on continuous emissions monitoring data for the calendar year. The amount of any such payments due for a calendar year shall be determined by March 1st of the following year and be paid to the City of Jacksonville, Land Acquisition Trust Fund, by May 1st. Any annual emissions of sulfur dioxide above 2208 TPY but below the maximum permitted annual emissions shall not constitute a violation of the Conditions of Certification or of this Agreement.

8. As an incentive to achieve lower nitrogen oxide emissions than permitted under the Conditions of Certification, CBC shall pay annually to the City of Jacksonville, Land Acquisition Trust Fund, \$200 for each ton of nitrogen oxides emitted in excess of 1948 tons per calendar year from the CBCP's three circulating fluidized bed boilers, combined, up to the total annual permitted nitrogen oxide emissions for the Project; provided, however, that any taxes, charges or fees payable under an applicable regulatory program on

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account of emissions above 1948 tons per year but below the maximum permitted annual emissions shall be deducted from the \$200 per ton payable under this provision. The annual nitrogen oxide emissions from the CBCP's CFB boilers for purposes of this provision shall be determined based on continuous emissions monitoring data for the calendar year. The amount of any such payments due for a calendar year shall be determined by March 1st of the following year and be paid to the City of Jacksonville, Land Acquisition Trust Fund, by May 1st. Any annual emissions of nitrogen oxides above 1948 TPY but below the maximum permitted annual emissions shall not constitute a violation of the Conditions of Certification or of this Agreement.

9. CBC agrees to donate to the City of Jacksonville the sum of \$575,000 within 30 days after commencement of commercial operation. Of this sum, \$350,000 shall be earmarked for construction of a new fire station east of the rail line in the vicinity of the intersection of Main St. and Busch Dr. to improve response times for emergency vehicles to reach the residential areas near the Project site. The other \$225,000 shall be earmarked for the purchase of one (1) mobile air quality monitoring van, for use by the City of Jacksonville Department of Regulatory and Environmental Services to monitor ambient air for concentrations of non-criteria pollutants. The City of Jacksonville shall use its best efforts to acquire such an air quality monitoring van for a purchase price less than \$225,000. If the City is successful in

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acquiring such a van for less than \$225,000, the remaining funds shall be applied toward the construction of the new fire station.

10. CBC agrees to provide onsite and offsite improvements to mitigate impacts across the Broward River from noise and light created by the Project. Such improvements shall be done in accordance with the landscape plan for the Project as approved by the City of Jacksonville on April 2, 1993. During the first three years of commercial operation, CBC, after consultation with the Citizens' Committee, Inc., will provide further mitigation for noise and light impacts by providing additional onsite or offsite improvements including improvements to the CBCP, which are intended to reduce such impacts; however, no such further improvements and related services, including consulting fees, shall exceed a total cost of \$120,000. Any such improvements to the Project shall not occur if such mitigation would cause any adverse impacts to, including filling of, wetlands; require adverse modifications of the stormwater management system or ponds; or cause a violation of the conditions of certification, applicable law or the City of Jacksonville's landscape ordinance.

11. The Project shall be constructed in conformance with the conceptual Site Plan attached hereto as Attachment D. This site plan represents the facilities that are currently to be constructed and operated pursuant to the Site Certification, as modified pursuant to these proceedings and this Agreement, and the locations of those facilities. Any future modifications to this Site Plan shall be made in accordance with applicable law and regulations.

12. The parties agree that CBC will not be required to pursue a federal National Pollutant Discharge Elimination System (NPDES) or other permit for a surface water discharge permit for any Phase II water treatment system as referenced in the Siting Board's Order Instituting Modification Proceedings, dated June 17, 1992. No such Phase II water treatment system is proposed and any prior proposal has been withdrawn in favor of the CBCP's zero discharge system.

13. The parties hereto agree not to oppose the issuance of any NPDES permit for the Project for the discharge of storm water or runoff caused by extreme rainfall events from the yard area and storage area runoff ponds as shown on Attachment D, provided that the proposed discharge is consistent with the data previously submitted on or about April 4, 1993 to DER, SJRWMD, and the City of Jacksonville in support of the Petition for Modification of Certification. For purposes of this agreement, an extreme rainfall event is defined as 1) a 50 year/24 hour storm for runoff from the storage area; 2) a 22 year/24 hour storm for runoff from the yard area when the CBCP turbine generator is operating; or 3) a 12 year/24 hour storm for runoff from the yard area when the CBCP turbine generator is not operating.

14. The parties agree that there is no basis to require the preparation or completion of an environmental impact statement (EIS) for the Project and that the parties will not request that such an EIS be completed or prepared.

15. Any proposal to plant trees as an offset of carbon dioxide emissions from the Project, as proposed by a previous owner



12. The parties agree that CBC will not be required to pursue a federal National Pollutant Discharge Elimination System (NPDES) or other permit for a surface water discharge permit for any Phase II water treatment system as referenced in the Siting Board's Order Instituting Modification Proceedings, dated June 17, 1992. No such Phase II water treatment system is proposed and any prior proposal has been withdrawn in favor of the CBCP's zero discharge system.

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14. The parties agree that there is no basis to require the preparation or completion of an environmental impact statement (EIS) for the Project and that the parties will not request that such an EIS be completed or prepared.

15. Any proposal to plant trees as an offset of carbon dioxide emissions from the Project, as proposed by a previous owner

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of the stock of CBC, is satisfied by the improvements made pursuant to the modified conditions of certification and this Agreement.

16. Seminole Kraft stipulates that the issuance of the original certification for the CBCP consumed all creditable emissions resulting from the shutdown of Seminole Kraft's existing bark and power boilers. Any creditable emissions resulting from the shutdown of the kraft recovery boilers, lime kilns, smelt dissolving tanks and slaker No. 3 shall be determined as provided in Rule 17-212.400(a), F.A.C. and any permit issued for SK's three proposed package boilers; but SK acknowledges that no creditable emissions remain for sulfur dioxide.

17. The Project and the Seminole Kraft recycling mill are independent sources of air emissions. Accordingly, neither shall be entitled to receive further air emission credits or offsets based upon the operating performance of the other below its air emission limits established in the attached Conditions of Certification or any air permit nor shall there be enforcement taken against one of these parties for violations of legal requirements by the other of these two parties.

**D. Other Provisions**

18. With respect to the first public announcement of this settlement agreement, the timing and wording of the first release of this Agreement will be reserved to the City of Jacksonville, the Sierra Club, Audubon Societies, Stafford Campbell and the Citizens' Committee, after consultation on such timing and wording with representatives of CBC and Seminole Kraft. Nothing released is to

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be derogatory of any party to this Agreement, nor inconsistent with the terms of this Agreement. Subsequent releases may be made by any party to this Agreement at its option, but in all instances shall be consistent with the terms of this Agreement.

19. The Parties agree to cooperate in obtaining final action by the Siting Board on the proposed modification as expeditiously as possible. The Parties agree that any presentation which they may make to the Hearing Officer and the Siting Board shall be consistent with the terms, provisions and spirit of this Agreement and with the modified conditions of certification. The parties further agree to consult with one another in advance of the meeting of the Siting Board concerning any presentation they may make to the Board.

20. The Citizens' Committee Inc., Sierra Club, Florida Audubon Society, Duval Audubon Society, and Stafford Campbell agree to return no later than April 30, 1993 to counsel for CBC and SK, respectively, all copies of all documents which are subject to any confidentiality agreement in this case.

21. Within 30 days following final action by the Siting Board approving the modifications of site certification, CBC will state in writing to the United States Environmental Protection Agency that it will operate the Project in compliance with Section II of the Conditions of Certification attached hereto and Paragraph 5 of this Agreement as though those provisions were incorporated into the existing air permit for the Project and accepts them as

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federally enforceable. CBC will contemporaneously provide a copy of this letter to the other Parties to this Agreement.

22. As an element of this Agreement, CBC has provided the Certificate attached as Attachment E.

23. All Parties waive any right to appeal, to challenge or to take other judicial or administrative action to oppose, in any forum available, the issuance of a final revised air permit for the Project which contains permit conditions that are substantially equivalent to the Conditions of Certification contained in Section II of the conditions of certification in Attachment B hereto and the additional provisions of Paragraph 5 herein. The Parties reserve and do not waive the right to challenge or otherwise oppose any final revised air permit for the Project that contains conditions substantially different from those addressed by section II of the conditions of certification and Paragraph 5 of this Agreement.

24. This agreement may be executed in multiple counterparts.

WHEREFORE, the parties hereto signify their ratification of this Settlement Stipulation by affixing their signatures hereto:

Stafford Campbell

[Signature]  
Date: 4/19/93

Sierra Club, Florida Audubon Society, The Duval Audubon Society, Inc.

By: James A. Heard  
James Heard, Attorney  
Date: 4/13/93

Citizens' Committee, Inc.

By: Barbara Broward  
Barbara Broward, President  
Date: 4/13/93

Cedar Bay Cogeneration, Inc.

By: [Signature]  
Gary P. Sams, Attorney  
Date: 4/12/93

Florida Department of Environmental Regulation  
By: Richard T. Donelan  
Richard T. Donelan  
Assistant General Counsel

Date: 12 April 93

City of Jacksonville

By: [Signature]  
ED AUSTIN  
Its: MAYOR  
Date: April 14, 1993

St. Johns River Water Management District

By: Nancy B. Barnard  
Assistant General Counsel  
Its: Assistant General Counsel  
Date: 13 April 93

Seminole Kraft Corporation


By: [Signature]  
Scott Shirley, Attorney  
Date: 4/12/93

Charles W. Bostwick

[Signature]  
Date: 13 April 1993

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The Estate of William C.  
Bostwick and Barnett Banks  
Trust Company, N.A.

By:   
Charles W. Bostwick

Date: 12<sup>th</sup> April 1973

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SETTLEMENT STIPULATION

ATTACHMENT A

ALL MEMBERS OF CITIZENS' COMMITTEE

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ATTACHMENT A

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC. and SEMINOLE  
KRAFT CORPORATION,

Petitioners.

vs.

DEPARTMENT OF ENVIRONMENTAL  
REGULATION,

Respondent,

and

CITY OF JACKSONVILLE, DEPARTMENT OF  
COMMUNITY AFFAIRS, PUBLIC SERVICE  
COMMISSION, ST. JOHNS RIVER WATER  
MANAGEMENT DISTRICT, JACKSONVILLE  
ELECTRIC AUTHORITY, CHARLES W.  
BOSTWICK, WILLIAM C. BOSTWICK,  
BARNETT BANKS TRUST COMPANY, N.A.,  
IMESON INTERNATIONAL PARK, INC.,  
INDUSTRIAL PARK DEVELOPMENT  
CORPORATION, CITIZENS COMMITTEE,  
INC., SIERRA CLUB, FLORIDA AUDUBON  
SOCIETY, THE DUVAL AUDUBON SOCIETY,  
INC. and STAFFORD CAMPBELL,

CASE NO. 88-5740

Intervenors.

AFFIDAVIT OF LISA BARCLAY COOPER

Before me, the undersigned authority, personally appeared Lisa Barclay Cooper, who,  
being first duly sworn, deposes and says:

1. I am counsel of record for intervenor The Citizens' Committee, Inc., in the above-  
styled action. Following is a true and complete list of the members of The Citizens' Committee,  
Inc.:



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- 1. Barbara Broward, President
- 2. Jack B. Lee, Vice President
- 3. Charles. L. Daniels, Vice President
- 4. William C. Val Bostwick, Jr., Secretary
- 5. Dorothy D. Mathias, Treasurer

FURTHER, THE AFFIANT SAYETH NOT.

*Lisa Cooper*  
 LISA BARCLAY COOPER

Sworn to and subscribed before me  
this 12th day of April, 1993.

*Margaret A. Z. Stanley*  
 Signature of Notary Public

Margaret A. Z. Stanley  
 Name of Notary (Typed, Printed or Stamp)

Commission Number (if not legible on seal):

My Commission Expires (if not legible on seal):

NOTARY PUBLIC, STATE OF FLORIDA  
 My commission expires Aug. 30, 1993  
 Bonded thru Patterson - Becht Agency

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**SETTLEMENT STIPULATION**

**ATTACHMENT B**

**CONDITIONS OF CERTIFICATION**  
**APRIL 7, 1993**

Attachment 6

BEFORE THE GOVERNOR AND CABINET  
STATE OF FLORIDA  
SITTING AS THE SITING BOARD

IN RE:  
POWER PLANT SITE CERTIFICATION  
OF CEDAR BAY COGENERATION  
PROJECT, PA-88-24

DOAH Case No. 88-5740  
OGC Case No. 88-1089

FINAL ORDER APPROVING MODIFICATION OF CERTIFICATION

On June 17, 1992, the Siting Board entered an Order Instituting Modification Proceedings with respect to the power plant site certification issued February 18, 1991, to AES Cedar Bay, Inc., and Seminole Kraft Corporation for the Cedar Bay Cogeneration Project in Jacksonville. The certification modification proceedings were docketed as DOAH Case No. 88-5740. On or about April 13, 1993, all parties to the modification proceedings before DOAH executed a Settlement Stipulation dated April 12, 1993, which resolved all disputed issues of fact and law among the parties. On April 14, 1993, a Joint Agreed Motion to Relinquish Jurisdiction based upon the Settlement Stipulation was filed by the Department on behalf of all parties. On April 28, 1993, the assigned DOAH Hearing Officer, Robert T. Benton II, entered an order relinquishing jurisdiction of the proceeding to the Board for the purpose of taking final agency action in the matter.

The Siting Board, having reviewed the terms of the Settlement Stipulation and otherwise having been fully advised as to this matter, concludes that the Stipulation effects an appropriate resolution of the controversy over the site certification for the

Cedar Bay Cogeneration Project. The Board believes that this resolution is consistent with the public interest and with the intent of the Board as expressed in its Order of June 17, 1992. The revised Conditions of Certification agreed to by all parties and attached as Appendix A implement the agreed modifications and improvements to the project and assure that construction and operation will comply with the non-procedural standards of the agencies of jurisdiction.

Accordingly, the Board ORDERS:

1. The certification for the Cedar Bay Cogeneration Project, PA 88-24, issued February 18, 1991, is MODIFIED. The Conditions of Certification contained in Appendix A shall henceforth apply to govern construction and operation of the Cedar Bay Cogeneration Project in accordance with Section 403.511, Florida Statutes (Supp. 1992).
2. The certification is further MODIFIED to reflect that the name of certificate holder AES Cedar Bay, Inc. has been changed to Cedar Bay Cogeneration, Inc.

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes (Supp. 1992) by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Regulation and Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied with the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days

from the date this Order is filed with the Clerk of the Department of Environmental Regulation.

DONE AND ORDERED this 11<sup>th</sup> day of May, 1993, in Tallahassee, Florida, pursuant to the vote of the Governor and Cabinet, sitting as the Siting Board, at the duly constituted Cabinet meeting on May 11, 1993.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

*Richard Carter*      5-14-93  
Clerk                              Date

BY THE GOVERNOR AND CABINET,  
SITTING AS THE SITING BOARD

*Lawton Chiles*  
Lawton Chiles, Governor

CERTIFICATE OF SERVICE

I DO HEREBY CERTIFY that a true and correct copy of the foregoing document has been sent by U.S. Mail or by Hand Delivery to the following listed persons:

Gary Sams, Esq.  
Hopping Boyd Green & Sams  
P O Box 6526  
Tallahassee FL 32314

Gregory K. Radlinski, Esq.  
City of Jacksonville  
600 City Hall  
220 E Bay St  
Jacksonville FL 32202

Terry Cole, Esq.  
Scott Shirley, Esq.  
Oertel Hoffman Fernandez & Cole  
P O Box 6507  
Tallahassee FL 32314-6507

M.B. Adelson, IV  
Assistant General Counsel  
Douglas Bldg MS-35  
3900 Commonwealth Blvd  
Tallahassee FL 32399-3000

Jim Antista, General Counsel  
Florida Game & Fresh Water  
Fish Commission  
620 S Meridian Rd  
Tallahassee FL 32399-1600

Rob Vandiver, General Counsel  
Mike Palecki, Chief  
Bureau of Electric & Gas  
Florida Public Service Comms  
101 E Gaines St  
Tallahassee FL 32399-0850

Lucky Osho, Esq.  
Department of Community Affairs  
2740 Centerview Dr  
Tallahassee FL 32399-2100

James A. Heard, Esq.  
2902 Independent Sq  
Jacksonville FL 32202

Earl M. Barker, Esq.  
Slott & Barker  
334 East Duval St  
Jacksonville, FL 32302

Lisa B. Cooper, Esq.  
Margol & Pennington  
76 Laura St  
Jacksonville FL 32202

Lawrence N. Curtin, Esq.  
Holland & Knight  
P O Drawer 810  
Tallahassee FL 32302

Nancy B. Barnard, Esq.  
St Johns River Water  
Management District  
P O Box 1429  
Palatka FL 32178-1429

this 13<sup>th</sup> day of May, 1993.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
RICHARD T. DONELAN, JR.  
Assistant General Counsel

Twin Towers Office Bldg  
2600 Blair Stone Rd  
Tallahassee FL 32399-2400  
Telephone: 904/488-9730

State of Florida Department of Environmental Protection  
CBCP/Seminole Kraft Corp.  
Cedar Bay Cogeneration Project  
PA 88-24A

(Revised 4/12/93)

CONDITIONS OF CERTIFICATION

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CEDAR BAY COGENERATION, INC./SEMINOLE KRAFT CORP.  
CEDAR BAY COGENERATION PROJECT  
PA 88-24A

CONDITIONS OF CERTIFICATION

When a condition is intended to refer to both Cedar Bay Cogeneration, Inc. (CBC) and Seminole Kraft Corp., the term "CBC/SK" or "permittees" will be used. When a condition is intended to refer to the "Cedar Bay Cogeneration Project" the terms "Cedar Bay Cogeneration Project", "CBCP", or "Project" will be used.

Where a condition applies only to Cedar Bay Cogeneration, Inc. the term Cedar Bay Cogeneration, Inc."(CBC) or the term "permittee," where it is clear that "CBC" is the intended responsible party, will be used. Similarly, where a condition applies only to Seminole Kraft Corp., the term "Seminole Kraft Corp." or the abbreviation "SK" or the term "permittee," where it is clear that SK is the intended responsible party, will be used. The Department of Environmental Protection may be referred to as DEP or the Department. RESD represents the City of Jacksonville, Regulatory and Environmental Services Department. SJRWMD represents the St. Johns River Water Management District.

I. GENERAL

The construction and operation of CBCP shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters 17-210 through 17-297, 17-302, 17-4, 17-256 (Opening Burning), 17-601, 17-702, 17-312, 17-532, 17-550, 17-555, 17-25, 17-610, 17-660, and 17-772, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

II. AIR

The construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions of certification as indicated.

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the SK recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

d. The sulfur content of the coal shall not exceed 1.2% by weight on an annual basis. The sulfur content shall not exceed 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with No. 2 fuel oil with a maximum sulfur content of 0.05% by weight. The fuel oil shall normally only be used for startups. During commercial operation the maximum annual oil usage shall not exceed 1,900,000 gals./year. The maximum heat input from the fuel oil shall not exceed 380 MMBtu/hr. for each of the CFBs.

f. The CFBs shall be fueled only with the fuels permitted in Conditions II.A.1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DEP pursuant to condition XXI, Modification of Conditions.

g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed  $25.98 \times 10^6$  MMBtu/yr total annual heat input.

h. To the extent that it is consistent with Condition II.A.1b. and the following, CBCP shall burn all of the short fiber rejects generated by Seminole Kraft in processing recycled paper. No less than ninety (90) days prior to completion of construction, CBCP shall submit a plan to DEP for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DEP and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DEP and to the RESD within forty-five (45) days of completion of the test burn. DEP shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this Condition of Certification.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.
- c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.
- d. Selective Non-catalytic Reduction (SNCR) for control of NOx.
- e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

3. Flue gas emissions from each CFB shall not exceed the following:

<u>Pollutant</u>	<u>lbs/MMBtu</u>	<u>Emission Limitations</u>		
		<u>lbs/hr.</u>	<u>TPY</u>	<u>TPY for 3 CFBs</u>
CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758	2273
NOx	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--	--
	0.20 <sup>4</sup>	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> S <sub>04</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.01	0.04	0.11

[Note: TPY represents a 93% capacity factor.]

- (1) Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when 1-hour standard applies.
- (2) Thirty-day rolling average.
- (3) Three-hour rolling average.
- (4) Twelve-Month rolling average (MRA).

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NOX and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMS) identified in Condition No. II.A.9.

7. The CFBs are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOx, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NOx, commencing no later than 12 months from the initial test.

c. Compliance tests shall be performed for mercury (Hg), beryllium (Be), and lead (Pb) until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in Condition II.A.3. above. Such tests shall occur, as necessary, in the first, fifth and tenth years and additional successive five year intervals following commercial operation of the Project.

d. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

e. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel.

f. The following test methods and procedures of Rule 17-297, F.A.C., and 40 CFR Parts 60 and 61 or other DEP approved methods with prior DEP approval, in writing, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (14) Method 18 or 25 for VOCs.
- (15) Method 101A or EPA Method 29 for mercury.
- (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM<sub>10</sub> emissions.
- (18) Ammonia (NH<sub>3</sub>) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. These CEMS shall be used to determine compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with

the opacity requirements in Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

a. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown and malfunction.

b. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

d. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. II.A.11 herein, which exceeds the applicable emission limit in Condition No. II.A.3.

f. The permittee is subject to all applicable provisions of Rule 17-4.130, Plant Operation-Problems.

#### 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

b. All coal and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

#### 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to DEP's N.E. District office and to the RESD office, in accordance with 40 CFR 60.8.



b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., and 1,900,000 gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor
- Limestone Pulverizer/Conveyor
- Limestone Storage Bin
- Bed Ash Hopper
- Bed Ash Silo
- Fly Ash Silo
- Bed Ash Bin
- Fly Ash Bin
- Pellet Vibratory Screen
- Pelletizing Ash Recycle Tank
- Pelletizing Recycle Hopper
- Cured Pellet Recycle Conveyor
- Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., and 1,900,000 gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor
- Limestone Pulverizer/Conveyor
- Limestone Storage Bin
- Bed Ash Hopper
- Bed Ash Silo
- Fly Ash Silo
- Bed Ash Bin
- Fly Ash Bin
- Pellet Vibratory Screen
- Pelletizing Ash Recycle Tank
- Pelletizing Recycle Hopper
- Cured Pellet Recycle Conveyor
- Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each

source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading  
Ash Pellet Hydrator  
Ash Pellet Curing Silo  
Ash Pelletizing Pan

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Condition II. B.4., in accordance with Rule 17-296.711(2)(a), F.A.C. After the compliance tests have been performed, neither DEP nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DEP or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.

7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	Estimated Limitations		
	lbs/hr.	TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.24	0.32	0.64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NOx	2.40	3.25	6.5
VOC	0.05	0.06	0.12

Visible emissions from the dryers shall not exceed 5% opacity.

8. The maximum sulfur content of No. 2 fuel oil shall not exceed 0.05% by weight. The maximum firing rate of No. 2 fuel oil for each limestone dryer shall not exceed 120 gals/hr., or

350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and 700,800 gals/year, for the two dryers.

9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

10. Compliance test reports shall be submitted to RESD within 45 days of test completion in accordance with Rule 17-297.570 of the F.A.C.

11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation (BAR).

C. Requirements For the Permittees

1. Beginning one month after certification, CBCP shall submit to RESD and DEP's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

2. CBCP shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the RESD office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by CBCP. CBCP is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any CBCP unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.05 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of three years to be available for DEP and RESD inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. CBC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. CBCP shall provide stack sampling facilities as required by Rule 17-297.345 F.A.C.

9. Prior to commercial operation of each source, the permittee shall submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

#### D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DEP of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. Within one year of surrender of operating permits as provided above, SK shall have completed the following steps to ensure compliance with this condition:

- Remove all oil guns
- Remove motors and selected conveyor parts in wood feed system for bark boilers
- Dismantle stacks
- Disconnect boiler feedwater pumps
- Sever fuel line connections
- Remove fan motors

These sources shall not, under any circumstances, be restarted, refurbished or re-permitted as new or existing sources, at the SK or CBCP site.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

## E. SK Steam Boiler Emissions

1. This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, F.S., shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr of steam for use in its recycled paper process:

## Tons Per Year

CO	553
NO <sub>x</sub>	310
SO <sub>2</sub>	25, except as provided in (2) below

2. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein; and emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within Seminole Kraft's control. In no event shall the annual emissions of SO<sub>2</sub> from the steam boilers referenced above exceed a ceiling of 41 tons per year.

3. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SK, without supporting documents, in a newspaper of general circulation in Jacksonville, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by DEP until final disposition of any administrative proceedings.



### III. WATER DISCHARGES

Any discharges into any waters of the State during construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17-301, 17-302 and 17-660, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, CBCP shall comply with the following conditions of certification:

#### A. Plant Effluents and Receiving Body of Water

For discharges made from the CBCP power plant site the following conditions shall apply:

1. CBCP shall not discharge any cooling system, demineralizer regeneration, floor drainage or other process wastewaters from the operation of the CBCP facility into any waters of the State. CBCP shall install a closed-loop cooling water system in accordance with technical specifications set forth in the Zero Discharge System Plan submitted by CBCP to the Department.

2. Pursuant to the Zero Discharge Plan, CBCP shall make available to Seminole Kraft up to 500 gpm of reclaimed water that has been treated to a quality satisfactory for use in Seminole Kraft's cooling tower.

3. Receiving Body of Water - The receiving bodies of water for storm water discharges have been determined by the Department to be those waters of the St. John's River (during construction only) or the Broward River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes (F.S.).

4. Point of Discharge (POD) - The point of discharge has been determined by the Department to be where the storm water effluent physically enters the waters of the State in the St. John's River (during construction) via Outfall OSN 001 and Broward River (during construction and operation) via Outfall OSN 003 and OSN 008.

5. Chemical Wastes from CBCP - All low volume wastes (demineralizer regeneration, floor drainage, labs drains, and similar wastes) and chemical metal cleaning wastes shall be collected and treated in the the zero discharge treatment system or disposed of off-site.

6. Seminole Kraft Corporation (SKC) shall shut down the mill's once through cooling system within 10 days after written notification by DEP of the successful completion of the initial compliance tests on the CBCP boilers conducted pursuant to Condition II.A.7. SKC shall inform the DEP Northeast District Office of the shutdown and surrender all applicable operating permits for that facility within 21 days of such notification.

## 7. Storm Water Runoff

a. Construction - During construction there shall be no discharges from the stormwater basins for storms less than the ten-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in ten year, twenty-four hour storm shall meet the following limits and shall be monitored at OSNs 003 and 008 by a grab sample once per discharge, but not more often than once per week:

Effluent Characteristic	Discharge Limits
Flow (MGD)	Instantaneous Maximum
TSS (mg/l)	Report
pH	50
	6.0-9.0

All applicable discharge limitations, described in Part I of the NPDES permit (FL0041173) for stormwater discharges during the period of construction from this facility, shall apply under this permit and be reported to the Department as part of the Monthly Operation Report.

## b. Operation

1. Yard Area Runoff - During normal plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods greater than the 22-year, 24-hour rainfall. During periods of operation when the CBCP is off-line, these necessary measures, as specified above, shall be used during rainfall periods greater than a 12-year, 24-hour storm. The discharge shall comply with all the monitoring requirements for Yard Area Runoff specified in Part I of NPDES Permit FL0041173 for this facility.

2. Storage Area Runoff - During operation there shall be no discharges from the stormwater basins for storms less than the fifty-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in 50 year, twenty-four hour storm shall meet the limits in 7.a. above and shall be monitored at OSN 008 by a grab sample once per discharge, but not more often than once per week. The discharge shall comply with all the monitoring requirements for the Coal, Limestone, and Ash Storage Area specified in Part I of NPDES Permit FL0041173 for this facility.

c. Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt, and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 in the discharge to the St. Johns River and 6.5 to 8.5 in the Broward River.

d. Special consideration must be given to the control of sediment laden runoff resulting from storm events during the construction phase. Best management practices erosion controls should be installed early during the construction period so as to prevent the transport of sediment into surface waters which could result in water quality violations and Departmental enforcement action. Revegetation and stabilization of disturbed areas should be accomplished as soon as possible to reduce the potential for further soil erosion. Should construction phase runoff pose a threat to the water quality of state waters, additional measures such as treatment of impounded runoff or by the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.

e. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17-25.027, F.A.C.

f. Correctional action or modification of the system will be necessary should mosquito problems occur.

g. CBC shall submit to DEP with copy to RESD and the SJRWMD, erosion control plans for the entire construction project (or discrete phases of the project) detailing measures to be taken to prevent the offsite discharge of turbid waters during construction. These plans must also be provided to the construction contractor prior to the initiation of construction.

h. All swale and retention basin side slopes shall be seeded and mulched or sodded within thirty days following their completion and a substantial vegetative cover must be established within ninety days of seeding.

8. Sanitary wastes from CBCP shall be collected and routed for treatment to the SKC domestic wastewater treatment plant.

#### B. Water Monitoring Programs

1. Necessity and extent of continuation of monitoring programs may be modified in accordance with Condition No. XXI, Modification of Conditions.

2. Chemical Stormwater Monitoring - The parameters described in Condition III.A. shall be monitored during discharge as described in condition III A. commencing with the start of construction or operation of the CFBs and reported quarterly to the Northeast District Office.

#### 3. Coal, Ash, and Limestone Storage Areas

a. Runoff from the coal pile, ash and lime stone storage areas shall be retained on-site during normal operations up to the 50-year, 24-hour storm event. Monitoring

of metals, such as iron, copper, zinc, mercury silver, and aluminum, shall be done once a month during any month when a discharge occurs at OSNs 003 or 008.

b. Stormwater from the storage area runoff pond shall be sampled the first time each month there is a discharge to the cooling tower pretreatment system under the operating conditions approved herein. Samples shall be taken for 12 separate months and analyses performed as specified in Condition 5 below.

4. The ground water levels shall be monitored continuously at selected wells as approved by the SJRWMD. Chemical analyses shall be made on samples from all monitored wells identified in Condition IV.F. and IV.G. below. The location, frequency and selected chemical analyses shall be as given in Condition IV.F and IV.G. The ground water monitoring program shall be implemented at least one year prior to commercial operation of the CFBs. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/analysis to the SJRWMD.

5. The reclaimed water transferred to Seminole Kraft for cooling tower make-up water shall be monitored for the following parameters:

Flow (gallons per minute)	Continuous/Flow Meter
pH (standard units)	Weekly/Meter or Grab
Iron (mg/L)	Monthly/Grab
Total Copper (ug/L)	Monthly/Grab
Zinc (mg/L)	Monthly/Grab
Mercury (ug/L)	Monthly/Grab
Silver (ug/L)	Monthly/Grab
Aluminum (mg/L)	Monthly/Grab
Cadmium (ug/L)	Monthly/Grab
Arsenic (ug/L)	Monthly/Grab
Antimony (mg/L)	Monthly/Grab

#### IV. GROUND WATER

##### A. Water Well Construction Permit

Prior to the construction, modification, or abandonment of a production well for the SK paper mill, Seminole Kraft must obtain a Water Well Construction Permit from the SJRWMD pursuant to Chapter 40C-3, F.A.C. Construction, modification, or abandonment of a production well will require modification of the SK consumptive use permit when such construction, modification or abandonment is other than that specified and described on SK's consumptive use permit application form. The construction, modification, or abandonment of a monitor well specified in Condition IV.H. will require the prior approval of the Department. All monitor wells intended for use over thirty days must be noticed to RESD prior to construction or change of status from temporary to permanent.

##### B. Well Criteria, Tagging and Wellfield Operating Plan

Leaking or inoperative well casings, valves, or controls must be repaired or replaced by SK as required to eliminate the leak or make the system fully operational. Failure to make such repairs will be cause for deeming the well abandoned in accordance with Chapter 17.21.02(5), F.A.C., Chapter 373.309, Florida Statutes and Chapter 366.301 (b), and .307 (a), Jacksonville ordinance Code. Wells deemed abandoned will require plugging according to state and local regulations.

A SJRWMD-issued identification tag must be prominently displayed by SK at each SK withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. The SK must notify the SJRWMD in the event that a replacement tag is needed.

SK must develop and implement a Wellfield Operating Program within six (6) months after construction of wells or start-up of the CBCP. This program must describe which wells are primary, secondary, and standby (reserve); the order of preference for using the wells; criteria for shutting down and restarting wells; describe CBCP and SKC responsibilities in the operation of the well field, and any other aspects of well field management operation, such as who the well field operator is and any other aspects of wellfield management operation. This program must be submitted to the SJRWMD and a copy to RESD within six (6) months of certification and receive SJRWMD approval before the wells may be used to supply water for the Cedar Bay Cogeneration plant.

### C. Maximum Annual Withdrawals

CBCP's maximum annual use from the Floridan aquifer may not exceed 530.7 million gallons. Maximum daily use from the Floridan aquifer for the CBCP may not exceed 1.45 million gallons. The use of potable water from the Floridan aquifer for cooling purposes is prohibited. The use of potable water from the Floridan aquifer for control of fugitive dust emissions is prohibited when alternative water sources are available, such as treated wastewater, shallow aquifer wells or stormwater. The use of Floridan aquifer potable water for the sole purpose of waste stream dilution is prohibited.

### D. Water Use Transfer

The SJRWMD must be notified, in writing, within 90 days of the transfer of this certification. All transfers are subject to the provisions of Section 40C-2.351, F.A.C., which state that all terms and conditions of the permit shall be binding of the transferee.

### E. Emergency Shortages

Nothing in this certification is to be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage, is declared by the District Governing Board, the CBCP shall adhere to water shortage restrictions as specified by SJRWMD to the extent the restrictions apply to all other similar users.

### F. Monitoring and Reporting

1.a. The permittee shall maintain records of total daily use by the CBCP on a monthly basis for each year ending on December 31st. These records shall be submitted to the SJRWMD on Form EN-3 by January 31st of each year.

b. Prior to beginning water usage, all points where water is delivered from the SKC water supply or wastewater system for use at CBCP must be equipped with totalizing flow meters. Such meters must maintain a 95% accuracy, be verifiable and be installed according to the manufacturer's specifications.

c. CBCP must maintain the required flow meter(s). In case of failure or breakdown of any meter or other flow measuring device, the SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

d. Total withdrawals from each monitored source must be recorded continuously, totalled monthly, and reported to the SJRWMD at least every six months from the initiation of the monitoring using SJRWMD Form No. EN-50.

e. CBCP must have all flow meters checked for accuracy once every 3 years within 30 days of the anniversary date of commencement of operation of the CBCP, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD Form No. EN-51 must be submitted to the SJRWMD within 10 days of meter inspection and calibration.

2. Water quality samples shall be taken by SK in May and October of each year from each SK production well. The samples shall be analyzed by a DEP certified laboratory for the following parameters:

Magnesium	Sulfate
Sodium	Carbonate
Potassium	Bi-Carbonate (or alkalinity if pH is 6.9 or lower)
Chloride	Calcium

All major ion analyses shall be checked for anion/cation balance and must balance within 5 percent prior to submission. It is recommended that duplicates be taken to allow for laboratory problems or loss. The sample analyses shall be submitted to the SJRWMD by May 30 and October 30 of each year.

3. Legal uses of water existing at the time of certification application may not be significantly adversely impacted by the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.

4. Off-site land uses existing at the time of certification application may not be significantly adversely impacted as a result of the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to revocation or modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.

5. During the seventh year following issuance of this certification order, CBCP shall submit a report to SJRWMD, DEP, and RESD demonstrating compliance with these conditions of certification, Chapter 373, Florida Statutes, and the Rules of SJRWMD and DEP, applicable to the consumptive use of water. Compliance shall be demonstrated with rules and statutory provisions in effect at that time.

SJRWMD shall evaluate the report and notify DEP in a report of any issues regarding compliance with this certification and applicable rules and statutory provisions, including whether the consumptive use of water for the CBCP complies with those provisions of Chapter 272, Florida Statutes, and DEP's and SJRWMD's rules applicable to its consumptive use and whether any conditions of certification must be amended, added or deleted in order to insure that the referenced rules and statutory provisions are complied with. SJRWMD shall respond within 30 days of receipt of CBCP's report as to whether or not it contains information sufficient to make a determination as to compliance with the referenced rules and statutory provisions. Thereafter, DEP shall notify CBCP and RESD within ninety (90) days after DEP's determination that CBCP's report is sufficient. Section 40C-1.610, F.A.C., shall apply. An opportunity for hearing pursuant to Section 120.57, Florida Statutes, shall be afforded any party. In any hearing requested pursuant to this condition of certification, the burden of demonstrating compliance shall be on CBCP. The continued consumptive use of water for the CBCP shall be dependent upon CBCP demonstrating and presenting sufficient data to establish that its consumptive use meets the referenced rules or statutory provisions. The Board hereby delegates to the Secretary the authority to enter final orders regarding this condition in the event an administrative hearing is requested.

#### G. Ground Water Monitoring Requirements

After consultation with the DEP, RESD, and SJRWMD, CBCP shall install a monitoring well network to monitor ground water quality horizontally and vertically through the aquifer above the Hawthorn Formation. Ground water quantity and flow directions will be determined seasonally at the site through the preparation of seasonal water table contour maps, based upon water level data obtained during the applicant's preoperational monitoring program. From these maps and the results of the detailed subsurface investigation of site stratigraphy, the water quality monitoring well network will be located. A ground water monitoring plan that meets the requirements of Section 17-522.600(3), F.A.C., shall be submitted to the Department's Northeast District Office for review. Approval or disapproval of the ground water monitoring plan shall be given within 60 days of receipt. Ground water monitoring shall be required at CBCP's pelletized ash storage area, each sedimentation pond, and each coal pile storage area, and SK's new lime mud storage area. Insofar as possible, the monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program, provided that the wells construction will not preclude their use. Existing wells will be properly sealed in accordance with Chapter 17-532, F.A.C., whenever they are abandoned due to construction of facilities. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water



equal to at least three casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. No sampling or analysis is to be initiated until receipt of written approval of a site-specific quality assurance project plan (QAPP) by the Department. Results shall be submitted to the RESD and the DEP NE District by the fifteenth (15th) day of the month following the month during which such analyses were performed prior to commercial operation, or by the 30th day of the month following the calendar quarter such analyses were performed after start of commercial operation. Testing for the following constituents is required around unlined ponds or storage areas:

TDS	Cadmium
Conductance	Zinc
pH	Copper
Redox	Nickel
Sulfate	Selenium
Sulfite	Chromium
Color	Arsenic
Chloride	Beryllium
Iron	Mercury
Aluminum	Lead
	Gross Alpha

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

- H. Leachate
  - 1. Zone of Discharge

Leachate from CBCP's coal storage piles, SK's lime mud storage area or CBCP's sedimentation ponds shall not cause or contribute to contamination of waters of the State (including both surface and ground waters) in excess of the limitations of Chapter 17-302, and 17-520, F.A.C., beyond the boundary of a zone of discharge extending to the top of the Hawthorn Formation below the waste landfill cell or pond rising to a depth of 50 feet at a horizontal distance of 200 feet from the edge of the storage pile, landfill or ponds, or rising to the boundary of the site, as appropriate.

## 2. Corrective Action

When the ground water monitoring system shows a potential for this facility to cause or contribute to a violation of the ground water quality standards of Chapter 17-520, F.A.C., at the boundary of the zone of discharge, the appropriate ponds or coal pile shall be bottom sealed, relocated, or the operation of the affected facility shall be altered in such a manner as to assure the Department that no violation of the ground water standards will occur beyond the boundary of the zone of discharge.

### I. Water Use Audit

At the end of the second year of production withdrawals, CBCP must have conducted an audit of the amount of water used in the various operational processes, landscaping practices and domestic facilities. If the audit results indicate losses of water due to leakage, a leak detection analysis must be conducted and submitted to the SJRWMD and a leak repair program must be implemented.

### J. Water Conservation Awareness Program

Prior to beginning water usage, CBCP must implement and submit to the SJRWMD an employee awareness program (including such measures as posting signs regarding water conservation and reporting leaks) concerning water conservation.

V. CONTROL MEASURES DURING CONSTRUCTION

A. Storm Water Runoff

During construction, appropriate measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the total suspended solids to 50 mg/l or less and pH to 6.0 to 9.0 at OSN 003 during rainfall events that are lesser in intensity than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 29 NTU above background in waters of the State.

Control measures shall consist at the minimum of sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 at OSN.003. Stormwater drainage to the Broward River shall be monitored as indicated below:

Monitoring Point	Parameters	Frequency	Sample Type
*Storm water drainage to the Broward River from the runoff treatment pond	BOD5, TOC, suspended solids, turbidity, dissolved oxygen, pH, TKN, Total phosphorus, Fecal Coliform, Total Coliform	**	**
	Oil and grease	**	**

\*Monitoring shall be conducted at suitable points for allowing a comparison of the characteristics of preconstruction and construction phase drainage and receiving waters.

\*\*The frequency and sample type shall be as outlined in a sampling program prepared by the applicant and submitted at least ninety days prior to start of construction for review and approval by the DEP Northeast District Office. The District Office will furnish copies of the sampling program to the RESD and SJRWMD and shall indicate approval or disapproval within 60 days of submittal.

B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and the RESD.

C. Environmental Control Program

CBCP shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental

practices and the applicable conditions of certification. A written plan for controlling pollution during construction shall be submitted to DEP and RESD within sixty days of issuance of the Certification. The plan shall identify and describe all pollutants and waste generated during construction and the methods for control, treatment and disposal. CBCP shall notify the Department's Northeast District Office and RESD by telephone within 24 hours if possible if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to the Department, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

**D. Construction Dewatering Effluent**

There shall be no discharge of construction dewatering effluent.

**VI. SAFETY**

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety Section of the Florida Department of Commerce will also be complied with.

**VII. SCREENING**

The CBCP shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

**VIII. TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS**

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XI, Noncompliance Notification.

**IX. SOLID WASTE STORAGE AND DISPOSAL**

CBCP shall be responsible for arranging for the proper storage, handling, disposal, or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the CBCP facility shall be removed from site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash will be pelletized, or made into aggregate form, and either

shipped back to the mine utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by companies specializing in the marketing and utilization of combustion by-products. The bottom ash and fly ash shall not be disposed of in a landfill within Duval County. If the CBCP decides to dispose of the bottom ash or fly ash by other than returning it to the mine, they shall notify RESD and DEP. Prior to removal and disposal of spent lime mud and pond tailings, the CBCP shall determine whether those wastes are hazardous under 40 CFR 26 and 17-730, F.A.C. If wastes are determined to be hazardous, they shall be disposed of in accordance with Chapter 17-730, F.A.C., after consultation with the DEP and RESD. If not hazardous, disposal shall be to a landfill designed to ensure compliance with groundwater quality criteria as contained in Chapters 17-3, and 17-730 F.A.C. All solid wastes disposed of on site shall comply with the provisions of Chapter 17-701, F.A.C. Ground water monitoring in accordance with 17-4, and 17-520, F.A.C. shall be implemented at the lime mud disposal site.

At least ninety (90) days prior to disposal or use of any sludge generated by pretreatment of reclaimed Seminole Kraft wastewater or zero wastewater discharge system, CBCP shall report to DEP and RESD concerning the chemical characterization of any such sludge. DEP reserves the right to require additional sampling and analysis as necessary to ensure that the above-cited regulations are complied with. Prior to any such sludge disposal, CBCP shall obtain a letter of acceptance from a permitted disposal site. On or before the last day of the first year of commercial operation, and each year of commercial operation thereafter, CBCP shall report to DEP and RESD concerning the composition and quantity of sludge generated by the zero water discharge system and the method of disposal, including name and location of facilities handling, treating, storing, and/or disposing of said sludge waste.

#### **X. CHANGE IN DISCHARGE**

All discharges or emissions authorized herein to CBCP shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of this certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of new or supplemental application to DEP's Siting Coordination Office pursuant to Chapter 403, F.S.

**XI. NONCOMPLIANCE NOTIFICATION**

If, for any reason, either permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the DEP's Northeast District Office and RESD office by telephone as soon as possible but not later than the first DEP working day after the permittee becomes aware of said noncompliance, and shall confirm the reported situation in writing within seventy-two (72) hours supplying the following information:

A. A description and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying event.

**XII. FACILITIES OPERATION**

Each permittee shall at all times maintain in good working order and operate as efficiently as possible all of its treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department (Northeast District) approval and after notice to RESD except where otherwise authorized by applicable regulations.

**XIII. ADVERSE IMPACT**

Each permittee shall take all reasonable steps to minimize any adverse impact resulting from its noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

**XIV. RIGHT OF ENTRY**

The permittees shall allow the Secretary of the Florida Department of Environmental Protection and/or authorized DEP representatives, and representatives of the RESD and SJRWMD, upon the presentation of credentials:

A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

B. To have access to and copy all records required to be kept under the conditions of this certification; and

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or emissional pollutants; and

D. To assess any damage to the environment or violation of ambient standards.

E. SJRWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related CBCP facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

F. RESD authorized staff, upon proper identification, will have permission to enter, inspect, sample any discharge, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

#### XV. REVOCATION OR SUSPENSION

This certification may be suspended, or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

#### XVI. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve either permittee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification, applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve either permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

#### XVII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor 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. The permittees shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

#### XVIII. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

**XVIV. DEFINITIONS**

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

**XX. REVIEW OF SITE CERTIFICATION**

A. The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination Control Act Amendments of 1972 for the plant units, the Department shall review all monitoring data that has been submitted to it or its agent(s) during the preceding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification of the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittees. Such review will be repeated at least every five years thereafter.

**XXI. MODIFICATION OF CONDITIONS**

The conditions of this certification may be modified in the following manner:

A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this certification.

B. All other modifications shall be made in accordance with Section 403.516, Florida Statutes.

**XXII. FLOOD CONTROL PROTECTION**

The plant and associated facilities shall be constructed in such a manner as to comply with the Duval County flood protection requirements.



**XXIII. EFFECT OF CERTIFICATION**

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application. Thus, conformance to those criteria, unless specifically amended, modified, or as the Department and parties are otherwise notified, is binding upon the applicants in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

**XXIV. NOISE**

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, each permittee shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise. The permittees shall comply with the applicable noise limitations specified in Environmental Protection Board Rules or The City of Jacksonville Noise Ordinance.

**XXV. USE OF WATER FOR COOLING PURPOSES**

The CBCP shall use reclaimed wastewater from the Seminole Kraft paper mill (in addition to any wastewater generated by the CBCP that is suitable for reuse for that purpose) for cooling water supply. In the event of disruption of SKC reclaimed wastewater as the cooling water makeup source for Cedar Bay, Inc., Cedar Bay, Inc. will utilize the water retained in SKC's holding basins or other non-potable sources of water as cooling water makeup.

At least 90 days prior to beginning commercial operation, Cedar Bay Cogeneration, Inc. shall submit to the Department a report concerning the actual measured pollutant characteristics of reclaimed water to be obtained from the Seminole Kraft paper mill. Such report shall be based on approved analytical results from four monthly samples obtained directly from the Seminole Kraft waste stream to be tied in with the CBCP cooling system, and shall include the concentrations of BOD5, COD, total organic carbon, total suspended solids, ammonia, pH, oil and grease, calcium, magnesium, sodium, potassium, alkalinity as mg of CaCO<sub>3</sub>, sulfate, chloride, nitrate, fluoride, silica, chlorine, phosphate (total) as P, cyanide, iron, manganese, aluminum, nickel, zinc, copper, cadmium, chromium, beryllium, arsenic, selenium, antimony, mercury, barium, silver, lead, thallium, phosphorus, and TKN. Where applicable, wastewater sampling and analyses conducted by SKC under the terms of operation permit number I016-200147 may be used to meet the terms of this condition. Any other sampling and analyses submitted under the terms of this permit shall be in accordance with a Department-approved Quality Assurance Plan. Results of all testing and sampling specified above shall be submitted to the Department within 30 days of testing.

Seminole Kraft's generation, treatment, or discharge of its wastewater is not covered by this site certification, and the permitting of Seminole Kraft's generation, treatment, or discharge of its wastewater does not require Siting Board approval.

#### **XXVI. ENFORCEMENT**

A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.

B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

C. RESD may initiate any and all lawful actions to enforce the conditions of this certification that are based on the Department's rules, after obtaining the Secretary's written permission to so process on behalf of the Department.

#### **XXVII. ENDANGERED AND THREATENED SPECIES**

Prior to start of construction, CBCP shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

#### **XXVIII. ENVIRONMENTALLY SENSITIVE LAND ACQUISITION**

##### **a. Periodic Payments**

1. As a condition of this certification, CBCP shall be required to make periodic monetary contributions for the purpose of funding a program for the acquisition and management of environmentally sensitive lands in Duval County, Florida. These payments shall be made to The Nature Conservancy, Inc., in trust for the State of Florida, to be used as provided in Section B below; and to the City of Jacksonville Environmental Land Acquisition Trust Fund, to be used as provided in Section C below.

2. The two million dollar payment made by or on behalf of the AES Corporation to The Nature Conservancy, Inc., (TNC) on or about June 16, 1992, shall be deemed to be the first of two periodic payments, totaling 4.5 million dollars, which the CBCP is obligated to make to TNC under this condition. The second periodic payment, 2.5 million dollars, shall be transmitted within 48 hours of the date on

which the CBCP commences commercial operation. TNC shall hold all funds received from CBCP or on behalf of CBCP in trust for the State of Florida.

3. Commencing on the anniversary of the second payment required by subsection (2) above, and continuing each year for 30 years thereafter, a payment of \$300,000 shall be submitted to the City of Jacksonville for each year that the CBCP remains in commercial operation. Each annual payment shall be transmitted within 48 hours of the anniversary of the date on which commercial operation commenced at CBCP, and shall be deposited in the Jacksonville Environmental Land Acquisition Trust Fund (JELATF) established by § 110.362 of the Jacksonville Ordinance Code.

4. Any failure to achieve timely transmission of a periodic payment required by this condition shall be grounds for revocation of the certification.

5. All funds attributable to the periodic payments required by this condition shall be received, held, disbursed, and expended in conformance with the applicable provisions of this Condition.

6. The express intent of this Condition is to assure that these periodic payments fund the acquisition of lands possessing substantial ecological value to the ecosystem of the St. Johns River watershed; and that lands acquired with funds provided under this condition be managed to retain or enhance the ecological values for which they were acquired. Funds made available under this Condition shall not be used for the development of urban recreational facilities which conflict with the natural resource values of a site. Prohibited facilities include ball fields or courts, playgrounds, and other developed amenities which are not dependent on ecological conditions for their existence and which are not ancillary to public access for recreational enjoyment of the available natural resources.

7. Properly managed natural resource-based recreation which does not degrade the ecological values of a site shall be encouraged through the development of appropriate management plans which shall be approved by the Department for any tract purchased under this Condition. Management of any site shall be consistent with the acquisition criteria specified in this Condition and shall be coordinated with other managers of natural lands in the region, such as the Department, the St. Johns River Water Management District, the National Park Service, the Division of Forestry, and the Florida Game and Fresh Water Fish Commission.

8. Funds made available under this Condition may be used to participate in existing public and private environmental land acquisition programs such as the Conservation and Recreational Lands Program (CARL), Save Our Rivers (SOR), Florida Communities Trust (FCT), Land

Acquisition Trust Fund (LATF), Preservation 2000, The Nature Conservancy, and other similar programs consistent with the intent behind this condition.

b. Land Acquisition Process: State of Florida

1. All land acquisition and management activities funded by the certification for the use and benefit of the State of Florida or its designee shall be undertaken in accordance with the process established by this Section.

2. The Nature Conservancy (TNC) shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this condition. The Department and TNC shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. There shall be a six member Land Acquisition and Management Advisory Council (LAMAC) comprising two representatives appointed by each of the following governmental entities: the Department, the St. Johns River Water Management District, and the City of Jacksonville. TNC shall appoint a representative to serve as chair of the LAMAC. The LAMAC shall hold one or more public hearings for the purpose of receiving public input as to lands potentially suitable for acquisition under this Section. Following appropriate public input, the LAMAC shall report its findings to the Department.

4. After review of the LAMAC report, TNC shall identify and list as many land acquisition options as it deems practicable. A copy of the list shall be submitted to each of the entities represented on the LAMAC. In establishing this list, TNC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

The LAMAC shall review and approve the land acquisition options list before any parcels are acquired under this condition.

5. Following approval of the list, TNC shall initiate selection of parcels to be acquired. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Secretary of the Department of a proposed acquisition, the parcel shall be purchased by TNC in trust for the State of Florida.

6. Title to any parcel purchased under this condition shall ultimately vest in a governmental entity following a determination by the Secretary of the Department, after consultation with the LAMAC, as to how the property can be managed most appropriately in the public interest. It is understood that title to a newly-purchased parcel may initially vest in TNC pending this determination and transfer of the title to an appropriate government entity or entities for management. The Siting Board hereby delegates to the Secretary of the Department the authority to select the governmental entity or entities most suitable to hold title and manage any property purchased under this condition. Upon notification from the Department that the selection has occurred, TNC shall forthwith execute a transfer of title to the designated entity or entities.

7. TNC shall be entitled to receive reimbursement from funds held by it under this Condition for any costs related to the performance of an acquisition under this Section. TNC may expend on an annual basis up to two per cent of the purchase price of a parcel to which it holds interim title to defray expenses associated with management of that parcel until title can be transferred as specified in subsection (6).

8. TNC is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments required under this condition to be capitalized for immediate utilization in land acquisition or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting TNC to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

c. Land Acquisition Process: City of Jacksonville

1. All land acquisition and management activities funded by Section A.3 of this Condition for the use and benefit of the City of Jacksonville or its designee shall be undertaken in accordance with the process established by this Section.

2. The Real Estate Division of the City of Jacksonville Public Works Department or another appropriate governmental entity shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this Condition. The Department and the City of Jacksonville shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. The City of Jacksonville, acting through the Jacksonville Environmental Land Selection Committee (JELSC) established by Mayoral Executive Order 85-81, as amended by Executive Order 91-147, pursuant to § 110.362 of the Jacksonville Ordinance Code, shall identify and list as many land acquisition options as it deems practicable. In establishing its list, JELSC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

d. the goals, objectives, and policies of the Conservation/Coastal Management element of the City's Comprehensive Plan, as amended.

A copy of the JELSC list, as it may be amended from time to time, shall be supplied to the Department and to the St. Johns River Water Management District. JELSC shall furnish a copy of the list upon its initial preparation and after any subsequent amendment thereto.

4. Lands to be acquired under this Section with funds made available in whole or in part under this Condition may be acquired only with the concurrence of the Jacksonville City Council and the Department. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Department and the City Council of a proposed acquisition, the parcel shall be purchased by the City.

5. With the approval of the Department and the City Council, title to land acquired under this Section may be sold or transferred to a governmental entity to facilitate effective and beneficial management of the parcel. Any funds received by the City as a result of sale or transfer of property previously acquired under this Section shall be deposited in the JELATF and remain subject to the provisions of this Condition.

6. Any funds paid by CBCP to the JELATF in fulfillment of this Condition or in accordance with any other Condition of Certification may be used for the purpose of managing lands acquired under this Section.

7. The City of Jacksonville is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments available under this Section to be capitalized for immediate utilization in land acquisition and management or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting the City to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

8. Sale or transfer of any parcel acquired under this Section shall be subject to a reversionary interest retained by the Board of Trustees of the Internal Improvement Trust Fund. In the event that the property ever ceases to be used and managed for environmental purposes consistent with this Condition, ownership of the property shall immediately revert to the State of Florida.

**XXIX. TRANSFER OF CERTIFICATION**

If the Cedar Bay Cogeneration Project is sold or legally transferred to another owner, notice of such sale or transfer shall immediately be submitted to the Florida Department of Environmental Protection and the agency parties to this certification by the previous certification holder (permittee) and the assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

Cedar Bay Comments

- 1-2 1. We have to limit quantity of fuel to tie in to the emissions (AP42 factors are in lb/ton  $\frac{1}{2}$  lb/1000 gals etc.)<sup>x</sup>
- 1-2 2. Heat input should not be a facility-wide limit, has to be a source by source limit (NSPS applies to each source)
- 1-2 3. Annual T14 limitations are for PSD purposes. 93% factor is given by them as to the annual usage so since that is the requested max, we limited the ~~max~~
- 4 4. CEMs comment OK  
The other comments are informational
- 4 5. Operative monitoring comment OK. Needs to say emission basis applicable.
- 6-8 6. Change volatility hourly to ~~TPWEEK~~ <sup>TPWEEK/month</sup> averaged over year? ?? T14 days?  
They should give us conservative estimates of their loading rates if they want them changed.
- 6-8 7. They asked for volatile organics to be capped at 87% factor. OK to delete 87% factor
- 6-7 8. Fuel oil rules in materials out (3). T14.6 is only emissions and not the basis of fuel fuel.



18  
6

9. VE is by rule (FACT) for material handling force  
 Cont grant 10% or 20% quantity.

7

10. Need to combine Case two, C1 & C10.

8

11. Fuel oil sampling is required for every shipment and  
 add the words "to be filed in the books".

8

12. Coal sampling, can delete such requirement, II C 6, 7.

9

13. Combine II D & II A 12. add "This requirement shall operate..."

~~XXXXXXXXXX~~

Betsy 2-14-90AES Heating Hurdles

- ① Sulfur content on long term wanted
  - ② Want natural gas
  - # ③ bubble - charge on 3 boilers & average it
  - ④ need lower load opn. ←
  - # ⑤ Heating BACT, (BACT → NSPS) ←
  - ⑥ limestone digester N<sub>2</sub> use
  - # ⑦ want std in lb/Btu basis, not coal sulf content (in operation records)
-

February 8, 1990

## AES Meeting

2 pm

Attendees

Clair, Pradep, Steve Woj, Steve Day &amp; Julie Slunden.

Issues

1. AES will send letter amendment requesting additional coal input when quality is bad (Btu is low), to increase TPH ; & TPM material handling
2. AES letter will request natural gas use for auxiliary fuel, in addition to fuel oil.
3. Need to get with EPA (Buck) to show in EIS that the PSD consumption is not quite as per p. 29 of the DOR report.
4. AES requested 70-100% ramp to be designated as normal operating range, acceptable to DOR p. 4.9b.
5. DOR needs to delete reference to Subpart BB in condition 4 on p. 8.
6. AES said they can live with the 93% limited annual capacity on boilers for now. They may go to 100% capacity with an amendment later.
7. AES can live with Btu restrictions on each boiler.
8. AES will correct material handling rates & emissions in letter, and also limestone dryer emissions.

BEST AVAILABLE COPY

9. Talk to Barry about BACT implications about lower turndown rates and the emission factors allowed. AES said they can live with the restrictions for now but may amend the factors later (with no increase in mass emissions).
10. Take out the oil #s from p. 6 # 3.

**FLORIDA PUBLISHING COMPANY**

*Publisher*

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }  
COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

Aretha R. Brown who on oath says that he is

Legal Advertising Representative of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the  
attached copy of advertisement, being a legal notice

in the matter of Notice of Intent to Issue Permit

in the \_\_\_\_\_ Court,

was published in THE FLORIDA TIMES-UNION in the issues of \_\_\_\_\_

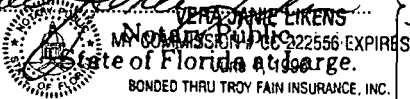
February 19, 1996

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me  
this 26th day of

March A.D. 1996

*Aretha R. Brown*



My Commission Expires .....

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT  
PSD-FL-137 (C)

The Department of Environmental Protection gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 9460 Eastport road, Jacksonville, Florida 3226. This Facility consists of three circulating fluidized bed coal-fired boilers, associated coal, ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and material feed rates associated with the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site. The increase in emission due to the amendment is less than 1 ton per year of particulate matter.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at The Douglas Building, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (Hearing) under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interest are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administration hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right with such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion pursuant to Rule 28-5.207, Florida Administrative Code.

The applicant/request and other information 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  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Department of Environmental Protection  
Northeast District  
Suite 2008  
7825 Baymeadows Way  
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Mr. Al Linero, Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number (904) 448-1344. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person(s). Such a request must be submitted to Mr. Linero at the above address within 30 days of this notice.

DER - AES Meeting  
9/2/92

Buck Owen	DER	487-0472
OWEN WILLIAMS	AES	751-1955
DAVID KEHRES	AES	904-751-4326
MARL WOODRUFF	AES	(904) 751-1007
Jerry Owen	DER	904-448-4330 x301
Jan Mandrup-Poulsen	DER	(904) 488-4520
BOB LEECH	DER/PA	(904) 448-4370 x107
Craig Diltz	DER/Tally	(904) 488-4522
Daryll Joyner	DER/PSES	904-488-0780
LARRY CURTIS	HUK/AES	904-224-7000
AL RUSHANAN	DER	904/488-4520
PHIL CORAM	FOEN	904/488-4522
JOHN KOOGER	KPA/AES	904/327-5822
Bruce Mitchell	FDER/DARM/BAR	904-488-1344
Preston Lewis	FDER/AIE	904/488-1344
Tom Rogers	" "	" "
Max Linn	" "	" "
Richard Donelan	DER-OGC	904/488-9730
Clair Fancy	PSR-BAR	904.488 1344

Mark E. Woodruff, P.E.  
Senior Project Engineer

David Kehres  
Senior Project Engineer



AES Cedar Bay, Inc.  
P.O. Box 26329  
Jacksonville, FL 32226-6329  
904-757-6382  
Fax: 904-751-1008



AES Cedar Bay, Inc.  
P.O. Box 26329  
Jacksonville, FL 32226-6329  
904-751-4326  
Fax: 904-751-1008

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MESSAGE CONTINUATION

MAR-15-94 WED 13:10

TERM ID:

F-9393

TEL ID:

NO.	DATE	ST. TIME	TOTAL TIME	IS	DEPT CODE	OK	NG
892	03-15	13:00	09:02:00			03	00



Department of Environmental Regulation  
**Routing and Transmittal Slip**

To: (Name, Office, Location) *r. 24-94*

1. ~~Bruce Mitchell~~

2. ~~John Good~~

*FBI*

4. ~~Clair~~ *Alaska*  
~~BAR~~ *Bruce: File*

Remarks:

**RECEIVED**

AUG 24 1994

Bureau of  
Air Regulation

From:

Date

Phone

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Bruce Mitchell

2. MS 5505

3. \_\_\_\_\_

5. \_\_\_\_\_

8-1-94  
filed

PLEASE PREPARE REPLY FOR:

\_\_\_\_ SECRETARY'S SIGNATURE

\_\_\_\_ DIV/DIST DIR SIGNATURE

\_\_\_\_ MY SIGNATURE

\_\_\_\_ YOUR SIGNATURE

\_\_\_\_ DUE DATE \_\_\_\_\_

COMMENTS:

RECEIVED

AUG 2 1994

Bureau of  
Air Regulation

ACTION/DISPOSITION

\_\_\_\_ DISCUSS WITH ME

\_\_\_\_ COMMENTS/ADVISE

\_\_\_\_ REVIEW AND RETURN

\_\_\_\_ SET UP MEETING

FOR YOUR INFORMATION

\_\_\_\_ HANDLE APPROPRIATELY

\_\_\_\_ INITIAL AND FORWARD

\_\_\_\_ SHARE WITH STAFF

\_\_\_\_ FOR YOUR FILES

FROM:

HP 

DATE: 8-1-94

PHONE: 7-0472

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

3. \_\_\_\_\_

*Bruce:*

- 1. \_\_\_\_\_
- 2. *Barrett may call you ~ who probably needs to be coord w/CF; All the pls. JB*
- 4. *m 3/10*

PLEASE PREPARE REPLY FOR:

- \_\_\_\_ SECRETARY'S SIGNATURE
- \_\_\_\_ DIV/DIST DIR SIGNATURE
- \_\_\_\_ MY SIGNATURE
- \_\_\_\_ YOUR SIGNATURE
- \_\_\_\_ DUE DATE \_\_\_\_\_

COMMENTS:

*Req EXTENSION -*

*Extension to remove unpelletized fly ash by rail car expires 3/10*

ACTION/DISPOSITION

- \_\_\_\_ DISCUSS WITH ME
- \_\_\_\_ COMMENTS/ADVISE
- \_\_\_\_ REVIEW AND RETURN
- \_\_\_\_ SET UP MEETING
- \_\_\_\_ FOR YOUR INFORMATION
- \_\_\_\_ HANDLE APPROPRIATELY
- \_\_\_\_ INITIAL AND FORWARD
- \_\_\_\_ SHARE WITH STAFF
- \_\_\_\_ FOR YOUR FILES

*Req. another 45 day extension until pelletizer is in operation.*

*[Barrett Ponder, Cedar Bay  
703 720 2923*

*LTR to CF on Mar 7;*

FROM: \_\_\_\_\_ DATE: \_\_\_\_\_ PHONE: \_\_\_\_\_

*Protection*

# Routing and Transmittal Slip

To: (Name, Office, Location)

1. ~~Clair Farcy - AARM - Magnolia Court~~
2. ~~Bruce "11"~~
3. ~~pls prepare comats~~
4. ~~for me to send to Cedar~~

Remarks: Ban. make sure BEST agrees with letter before I get

RECEIVED

NOV 12 1993

Division of Air Resources Management

it to sign.  
*Clair*

12-8-93  
 called for Barrett Parker - left a phone-mail message  
 called for Buck Owen - left a message  
 called for Ron Robinson - left a message

12-9-93  
 22102 left a message for R2 to call me. RA

From

*Buck Owen*

Date

*11-10-93*

Phone

*4870472*

904-830-3638

150-2105  
12-17-93

Richard Robinson

o RESD - provide notification 30 days

cond. <sup>II.A.</sup> #1.h.

test results 45 days

o  $< 90\% \rightarrow$  <sup>II.A.</sup> 8, i.e.

\* The compliance tests shall be cond. between 90-100% of the max. licensed capacity & 8, i.e. for each permitted fuel.

o page 3  $\rightarrow$  Section 2

1<sup>st</sup> para

CBCF  $\rightarrow$  426 ac yd/day

vs 2

420 Cite Cert

The max. charging rate to each of two CFBs from the 5kC reg. process,

1. to allow 210 yd<sup>3</sup>/day net / combined th of 420 yd<sup>3</sup>/day

o CEMS are out prior to the test burn

The CEMS data

i CEMS data submitted

o "1 test for 1 unit; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

o HCl [not necessary - Tally's call]

[EPA 601(b) remove July 1985]

296.700 [PM10]

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MESSAGE CONFIRMATION

DEC-02-93 WED 14:05

TEPH ID:

P-9959

TEL NO:

NO.	DATE	ST. TIME	TOTAL TIME	ID	DEPT CODE	OK	LG
224	12-08	14:01	00:24:36	9346303638		07	00

*12-8-93  
also mailed hard copy*

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To Richard Robinson	From Bruce Mitchell
Co. Deval	Co. FDEP/DARM/BAR
Dept. Air	Phone # 904-921-9506
Fax # 904-630-3638	Fax # 904-922-6979



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3325 8640432441

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Date **12/7/93**

From (Your Name) Please Print <b>Frank Stallwood</b>		Your Phone Number (Very Important) <b>(904-751-1007)</b>		To (Recipient's Name) Please Print <b>C.H. Fancy, P.E.</b>		Recipient's Phone Number (Very Important)	
Company <b>SEABAY GENERATING</b>		Department/Floor No.		Company <b>Chief, Bureau of Air Regulation</b>		Department/Floor No.	
Street Address <b>2600 EAST PORT RD</b>				Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.) <b>2600 Blair Stone Road</b>			
City <b>JACKSONVILLE</b>		State <b>FL</b>		City <b>Tallahassee</b>		State <b>FL</b>	
ZIP Required <b>3 2 2 1 8</b>		ZIP Required <b>3 2 3 9 9 - 2 4 0</b>					

**YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.)**

**IF HOLD AT FEDEX LOCATION, Print FEDEX Address Here**  
 Street Address

**PAYMENT** 1  Bill Sender 2  Bill Recipient's FedEx Acct. No. 3  Bill 3rd Party FedEx Acct. No. 4  Bill Credit Card

5  Cash Check

City State ZIP Required

<b>3</b> <b>PAYMENT</b>		<b>4</b> <b>SEVICES (Check only one box)</b>		<b>5</b> <b>DELIVERY AND SPECIAL HANDLING (Check services required)</b>		<b>6</b> <b>PACKAGES</b>		<b>WEIGHT</b> In Pounds Only		<b>YOUR DECLARED VALUE</b> (See right)		Emp. No.		Date		Federal Express Use	
1 <input type="checkbox"/> OTHER PACKAGING		16 <input type="checkbox"/> FEDEX LETTER*		1 <input type="checkbox"/> HOLD AT FEDEX LOCATION WEEKDAY (Fill in Section H)		1 13		1 13		1 13		<input type="checkbox"/> Cash Received				Base Charges	
12 <input type="checkbox"/> FEDEX PAK*		13 <input checked="" type="checkbox"/> FEDEX BOX		2 <input checked="" type="checkbox"/> DELIVER WEEKDAY (Fill in Section H)								<input type="checkbox"/> Return Shipment		<input type="checkbox"/> Chg. To Del.		<input type="checkbox"/> Chg. To Hold	
14 <input type="checkbox"/> FEDEX TUBE				31 <input type="checkbox"/> HOLD AT FEDEX LOCATION SATURDAY (Fill in Section H)								Street Address				Other 1	
				3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) (Not available to all locations)								City State Zip				Other 2	
				9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge)								Received By: <b>X</b>				Total Charges	
				4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge)								Date/Time Received		FedEx Employee Number		REVISION DATE 12/92 PART #137204 FXEM, 10/93 FORMAT #158	
				6 <input type="checkbox"/> DRY ICE (Dangerous Goods Shipper's Declaration not required)												158	

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6  DRY ICE (Dangerous Goods Shipper's Declaration not required)

12  HOLIDAY DELIVERY (If offered) (Extra charge)

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70  OVERNIGHT FREIGHT\*\* (Confirmed reservation required)

80  TWO-DAY FREIGHT\*\*

\* Economy Letter Rate not available. Minimum charge. One pound Economy rate.

\*\* Declared Value Limit \$500. Call for delivery schedule.

Dr. Wt. 9. UN 1845. X kg. 904 III

DESCRIPTION

Received At

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2  On-Call Stop 5  Station

7  Release Signature:

## MULTIPLE PACKAGE SERVICE

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SHIPMENT, APPLY  
THE SELF ADHESIVE  
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## TERMS AND CONDITIONS

### DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You and your refer to the sender, its employees and agents.

### AGREEMENT TO TERMS

By giving us your package to deliver, you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

### RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out this Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

### AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

### LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or \$100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay an additional charge for each additional \$100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable, if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

### DECLARED VALUE LIMITS

The highest declared value we allow for FedEx Letter and FedEx Pak shipments is \$500. For other shipments, the highest declared value we allow is \$25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is \$500. Items of "extraordinary value," include artwork,

jewelry, furs, precious metals, negotiable instruments, and other items listed in our current Service Guide.

If you send more than one package on this Airbill, you may fill in the total declared value for all packages, not to exceed the \$100, \$500 or \$25,000 per package limit described above. (Example: 5 packages can have a total declared value of up to \$125,000.)

If more than one package is shipped on this airbill, our liability for loss or damage will be limited to the actual value of the package(s) lost or damaged (not to exceed the lesser of the total declared value or the per package limits described above). You have the responsibility of proving the actual loss or damage.

### FILING A CLAIM

ALL CLAIMS MUST BE MADE BY YOU IN WRITING. You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

### RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

### NO C.O.D. SERVICES

NO C.O.D. SERVICES ON THIS AIRBILL. If C.O.D. Service is required, please use a Federal Express C.O.D. airbill for this purpose.

### RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any cost we may incur in either returning your package to you or warehousing it pending disposition.

### RIGHT OF REJECTION

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our current Service Guide.

### MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.



Department of Environmental Regulation

# Routing and Transmittal Slip

To: (Name, Office, Location)

1.

*John Brown*

2.

3.

*P.C. Administrator*

4.

~~*P & S*~~

Remarks:

~~*Preston*~~ - File with appropriate  
*Patty* records  
*JRS*

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AUG 10 1993

Division of Air  
Resources Management

From:

*Alv / Jay*

Date

Phone

## U.S. Generating Company

**Mark V. Carney, CCM**

*Manager, Environmental Permitting*

*John D. B. Parker*

7475 Wisconsin Avenue  
Bethesda, Maryland 20814

(301) 718-6899

Fax (301) 718-6908



Balance test

Env impacts of Cedar Bay + SK Package <  
 env impacts of existing Seminole Kraft with  
 old boilers

$$\left[ \begin{array}{l} 2.89 \times 10^{-5} \text{ for Hg} \\ \text{LB/MMBTU} \\ 2.6 \times 10^{-4} \text{ for Hg before} \\ \text{LB MM BTU} \end{array} \right.$$

Small boiler MACT for Seminole boilers  
 sig contribution

1-7-93

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3:00 meeting on AES Cedar Bay - s&c permits projects.

3:50 pm

D Howard Rhodes & Clair Fancy

- headed by Buck Owen

Preston Lewis, Max Linn, Cleve Holladay, John Reynolds, Richard Donellan

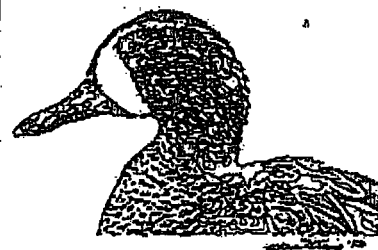
AES Cedar Bay - hearing in April<sup>12</sup> 93 - in FAX  
US Generation of Bechtel Corp.

- Agreement to reduce emissions enough so that s&c could put in 3 natural gas pkg boilers.
- want 100% distillate oil @ 0.5% S, by wt.
- proj. presented to the Governor & cabinet that the 3 pkg boilers would be fired by NG

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U.S. Fish and Wildlife Service  
Division of Refuges and Wildlife, Southeast Region



(404) 331-0830  
FTS 841-0830

75 Spring Street, Room 1240  
Atlanta, GA 30303

FAX (404) 730-2023  
FTS 880-2023

Date: 12/28/92

To: Mr. C.H. Fancy, FDER

From: Region 4

Subject: \_\_\_\_\_

Number Of Pages To Follow: 2

Remarks: Original was mailed 12/24/92.

\_\_\_\_\_  
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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
75 Spring Street, S.W.  
Atlanta, Georgia  
30303



December 24, 1992

Mr. C. H. Fancy  
Chief, Bureau of Air Regulation  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32309-0700

Dear Mr. Fancy:

We have reviewed the November 1992 Cedar Bay Cogeneration Project (CBCP) Air Quality Analysis that ENSR prepared to support the proposed modification of the CBCP Power Plant Site Certification (PPSC) issued on February 11, 1991. We appreciate having an opportunity to comment on this project. As you know, the proposed CBCP would be located near Jacksonville, approximately 45 km southeast of the Okefenokee Wilderness Area (WA) and 90 km southwest of the Wolf Island WA, both Class I air quality areas administered by the Fish and Wildlife Service. We understand that the modification would include the installation of better control technology on the CBCP boilers, resulting in a decrease in proposed emissions from the facility as currently certified.

ENSR's analysis shows that emissions from the CBCP as proposed to be modified, combined with the three recently proposed boilers for the Seminole Kraft Corporation (SKC) in Jacksonville, would be lower than either the CBCP as certified, or the existing SKC boilers and auxiliary equipment as they would be operated if the CBCP were not constructed. We are pleased to see that the proposed modification should result in an environmental benefit for the region. However, we believe that emissions could be reduced even further than those proposed in the modification.

We agree that selective noncatalytic reduction to control nitrogen oxide emissions, and circulating fluidized bed and fabric filtration to control sulfur dioxide (SO<sub>2</sub>) emissions represent best available control technology; however, we believe better SO<sub>2</sub> emission rates than those proposed can be achieved. For example, the 0.24 pounds per million Btu (lb/MMBtu) 3-hour average rate proposed in ENSR's analysis is less stringent than the recently permitted Keystone Cogeneration project in New Jersey (0.16 lb/MMBtu, 1-hour average) or the proposed Indiantown Cogeneration project in Florida (0.17 lb/MMBtu, 1-hour average).

**Best Available Copy**

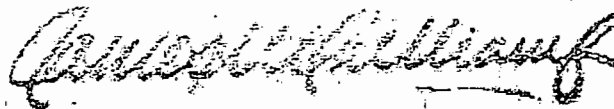
Therefore, to be consistent with other recently proposed and permitted projects, we recommend that the SO<sub>2</sub> emission limits for the CBCP be lowered accordingly.

ENSR performed SO<sub>2</sub> and nitrogen dioxide Prevention of Significant Deterioration (PSD) increment analyses for the Okefenokee and Wolf Island WAs, but they failed to assess potential effects of emissions from the CBCP on air quality related values in the Class I areas. Using the information provided in the Air Quality Analysis, we performed a visibility analysis for the closest area, the Okefenokee WA. Our modeling results show that both the CBCP as certified and the CBCP as proposed to be modified fail the conservative Level 1 VISCREEN analysis. However, we also performed a Level 2 analysis on the CBCP as proposed to be modified, and the results indicate that the facility would have low potential to cause visibility impairment due to plumes in the Okefenokee WA.

While we still recommend lower SO<sub>2</sub> emission limits to further reduce emissions from the CBCP, based on the overall emission reductions, ENSR's Class I increment analyses, and our visibility analyses, we support the current proposal to modify the facility as certified. However, because the net environmental benefit described in ENSR's analysis is contingent upon SKC's 5 existing boilers and auxiliary equipment (e.g. recovery boilers, lime kilns, and smelt dissolving tanks) being shut down once the CBCP begins operation, we recommend that the modified PPSC and PSD permit contain permit conditions detailing the required shut down of the existing equipment.

We ask that you send us copies of the State's preliminary determinations for the modified PPSC and PSD permit when they become available. In the meantime, if you have any questions regarding this matter, please contact Tonnie Maniero of our Air Quality office in Denver at 303/969-2071.

Sincerely yours,



James W. Pulliam, Jr.  
Regional Director

cc:  
Jewell Harper, Chief  
Air Enforcement Branch  
Air, Pesticides and Toxic Management Division  
U.S. EPA, Region 4  
345 Courtland Street, NE.  
Atlanta, Georgia 30365

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

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CECELIA C. SMITH

OF COUNSEL  
W. ROBERT FOKES

December 2, 1992

*BY FEDERAL EXPRESS*

Brian Mitchell  
National Park Service  
12795 West Alameda Parkway  
Lakewood, CO 80228

RE: Cedar Bay Cogeneration Project  
Site Certification No. PA-88-24  
Air Permit No. PSD-FL-137

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DEC 03 1992

D. E. R.  
SITING COORDINATION

Dear Mr. Mitchell:

As you may be aware, the Florida Power Plant Siting Board recently issued an order instituting modification proceedings for the Cedar Bay Cogeneration Project Site Certification in Jacksonville, Florida. The modification hearing is currently scheduled to begin January 19, 1993. At the request of Max Linn of the Florida Department of Environmental Regulation (FDER), we are providing you a copy of the Air Quality Analysis prepared by ENSR Consulting and Engineering in support of the modification proceedings. The proposed changes to the conditions of certification reflect reductions in emissions, and the Air Quality Analysis demonstrates that the impacts to the Class I areas will also be reduced.

You are requested to provide comments to Mr. Linn of FDER on the impacts to Class I areas, pursuant to Rule 17-210.350(2)(h), Florida Administrative Code. The Certification Order for the Project was originally issued in February of 1991, and the Prevention of Significant Deterioration (PSD) permit was issued in March of 1991. A separate request for revision of the PSD permit will be submitted in the near future.


The Air Quality Analysis is also being reviewed by the Department of Environmental Regulation. We will be contacting the Land Managers of the Okefenokee and Wolf Island Wilderness Areas to discuss the Project.



Brian Mitchell  
December 2, 1992  
Page 2

If you have any questions, please do not hesitate to contact us.

Sincerely,



Gary P. Sams  
Angela R. Morrison

cc: Jewell Harper, EPA, Region IV  
✓Hamilton S. Oven, Jr., FDER  
Richard T. Donelan, Jr., FDER  
Land Manager, Okefenokee Wilderness Area  
Land Manager, Wolf Island Wilderness Area  
Max Linn, FDER

# AES 'grossly misled' state, Chiles told

By Beverly Keneagy

Environmental writer

Florida Attorney General Bob Butterworth said yesterday that new evidence shows the state was "grossly misled" by AES Cedar Bay Inc. and Seminole Kraft Corp. when they applied for a permit to build a power plant in Jacksonville.

The companies' tactics amounted to a "bait-and-switch gimmick at the expense of Jacksonville citizens," and the state should begin proceedings today to suspend or revoke the AES permit, Butterworth said in a letter to Gov. Lawton Chiles and other Cabinet members.

Butterworth said his office uncovered a confidential memorandum between AES and Seminole Kraft that shows they planned to keep Seminole Kraft's boilers

operating once the AES plant started up. In their permit application, the companies said they planned to shut down the boilers, which opponents say are old and pollute the air.

Butterworth's findings come as he, five other Cabinet members and Chiles are to consider today the fate of the coal-fired plant AES is building on Jacksonville's Northside.

The \$470 million plant would provide steam to the adjacent Seminole Kraft paper mill and 250 megawatts to Florida Power & Light Co.

In its prepared statement yesterday, AES said the idea of keeping the boilers operating after the power plant began operating was "one of several options un-

(See AES, Page A-4)

## Company says application truthful

By Beverly Keneagy

Environmental writer

In the face of mounting criticism of its power plant in Jacksonville, AES Cedar Bay Inc. went on the defensive yesterday, saying it has been truthful while applying for an operating permit.

AES made its comments in a report to Gov. Lawton Chiles and the Cabinet, who are to meet today to decide whether to pursue a suspension or revocation of the permit.

AES was responding to a report released last week by the Florida Department of Environmental Regula-

tion, which said the state had been misled. The DER report recommended that the Cabinet suspend or revoke the AES permit until numerous questions about changes in the plant's environmental impact are resolved.

AES said it was submitting its own report to correct "various inaccuracies" in information submitted to the Cabinet.

AES said its report should "demonstrate that it did not make material false statements in connection with

(See COMPANY, Page A-4)

# AES misled Florida, attorney general says

(From Page A-1)

der consideration that had not been finalized" when the state permit was granted.

The AES statement also said it is a standard business practice to keep a business agreement confidential when it contains proprietary information.

Also yesterday, Mayor Ed Austin held a news conference to sign a City Council resolution adopted last week that sought a new state hearing on the AES project and "full disclosure" of the plant's environmental impacts.

Austin, who has been criticized for failing to take a firm stand on the AES plant, said yesterday's news conference had nothing to do with Butterworth's letter but was called to announce he would sign the resolution.

Butterworth's recommendation is similar to one last week by the Florida Department of Environmental Regulation, which said Chiles and the Cabinet should suspend or revoke the AES permit until numerous environmental issues are resolved.

Education Commissioner Betty Castor said yesterday that she will support Butterworth's recommendation.

"Without complete knowledge of the companies' intentions, it is impossible to determine the impact a project of this magnitude will have on the environment," Ms. Castor said.

Other Cabinet members said yesterday that they had not decided how they would vote.

Should the Cabinet agree to proceed with suspending or revoking the permit, the issue would be referred to a state hearing officer for review. The hearing officer would make a recommendation to the governor and Cabinet, who could then officially suspend or revoke the AES permit. Construction on the power plant, which is about 50 percent built, then would have to stop.

AES' Stinson said Butterworth's recommendation "demonstrates a lack of regard for the 700 workers at our site, 200 companies doing

business with us and the economy of Jacksonville."

Opposition to the plant increased late last year when Seminole Kraft decided it needed to keep three boilers operating even after the AES plant opened in 1994. That's contrary to a joint permit the state issued last year to AES and Seminole Kraft that requires the boilers be shut down.

The information prompted Austin to ask the state to investigate whether AES and Seminole Kraft misled the Cabinet when they applied for an operating permit.

The Cabinet assigned a special counsel, Denis Dean of the Attorney General's Office, to research the issue.

Dean found AES and Seminole Kraft did withhold information that could have affected the Cabinet's decision to grant AES an operating permit. However, he found the state law does not require the disclosure of future plans and no laws were broken to warrant suspending or revoking the permit.

However, a report released last week by the Florida Department of Environmental Regulation said Dean's report was "flawed." It recommended that Chiles and the Cabinet revoke the AES permit until numerous environmental issues are resolved.

Yesterday, the Attorney General's Office said it had continued researching the issue and it had now uncovered the new information showing AES and Seminole Kraft planned to keep Seminole Kraft's boilers operating once AES started up.

"The fact that DER had been kept in the dark about the existence of this agreement while the project's application was under consideration amounts to a bait-and-switch gimmick at the expense of Jacksonville citizens," Butterworth said.

Deputy Attorney General Peter Antonacci said the confidential memorandum, a letter of intent dated Sept. 10, 1990, showed AES and Seminole Kraft planned to proceed with the original permit and then later, once it was approved, attempt to change it. The permit was approved on Jan. 22, 1991.

**Staff writer Beth Reese Cravey contributed information to this report.**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JAN 21 2000

4 APT-ARB

Mr. A. A. Linero, P.E.  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**SUBJ: Preliminary Determination and Draft Permit for Cedar Bay Generating Plant  
(PSD-FL-137) located in Duval County, Florida**

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for Cedar Bay Generating Plant dated December 8, 1999. The preliminary determination is for the proposed modification of the operation of three circulating fluidized bed steam generators (boilers) and associated coal, limestone and ash handling areas. The boilers primarily combust crushed coal with No. 2 fuel oil combusted as backup fuel. As proposed, the permit allows several changes in permit conditions, including the following: an increase in excess emissions of carbon monoxide (CO), an increase in the 3-hour sulfur dioxide (SO<sub>2</sub>) emissions rate and a 10% increase in maximum heat input limits. Total emissions from the proposed project are not above the thresholds requiring PSD review for any regulated pollutants; however, some air quality impact modeling may be required for SO<sub>2</sub>.

Based on our review of the preliminary determination and draft PSD permit, we have the following comments on topics other than the air impact assessment. Air impact comments are provided at the end of this letter.

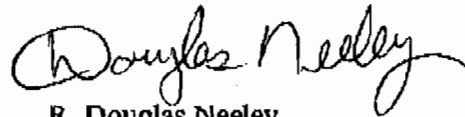
1. As indicated in Specific Condition No. II.A.9.e of the draft permit, FDEP is proposing to allow excess emissions of CO due to startup, shutdown or malfunction for up to 10 hours per cold startup as well as allowing excess emissions during warm startups and refractory curing. It is the U.S. Environmental Protection Agency's policy that BACT applies during all normal operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.

In terms of the air quality impact assessment, our comments regarding the modifications to the Cedar Bay Generating Plant (CBG) preliminary determination and draft PSD permit are as follows:

2. **Class I Area Impact Assessment** - The Class I air quality assessment does not provide significant impact assessments for the CBG emissions in the Class I areas. Only cumulative increment impact analyses are addressed in the air quality analysis report. The maximum impacts from CBG in the Class I area would be of value in this assessment.
3. **Class I and Class II Emission Inventories** - The specific procedures used to develop the emission source inventories used in the cumulative impact assessment for both PSD increment and National Ambient Air Quality Standard (NAAQS) compliance (Tables 1-3 through 1-5 of the November 1999 Air Quality Analysis Report) were not provided. It appears that the inventories used were from other air modeling studies. For Class II cumulative impact assessments, emission sources within at least 50 km of the significant impact area must be considered in the modeling assessment. For the Class I impact analysis, emission sources within 100 km to 150 km with a potential significant impact in the Class I area must be considered in the modeling. These distances may include sources located in Georgia. Confirmation is needed that the proper emission inventories were used in the cumulative impact modeling.
4. **Operational Configuration Worst Case** - The impact analysis indicates a single stack for the three CBG boilers. All impact assessments were performed, assuming all three boilers at 110 percent of full load, with an SO<sub>2</sub> emission rate of 3.6 lb/MMBtu. (Note: Assuming 110 percent heat rate, the emission rate modeled is associated with 0.36 lb/MMBtu not the 0.40 lb/MMBtu indicated in the report.) This is not a realistic assumption and may not provide the operating scenario producing the worst case ambient impacts.
5. **Modeled PSD Increment Violations** - Since CBG does not significantly impact the modeled Class I and II PSD increment violations, these violations will not affect the permitting of CBG. The modeled violations must be addressed and resolved by the Florida Department of Environmental Protection.
6. **Class I Area FLM** - The U.S. Fish and Wildlife Service federal land manager for the Wolf Island and Okefenokee PSD Class I areas should be notified of this PSD permit modification and given the opportunity to comment.

Thank you for the opportunity to comment on the Cedar Bay Generating Plant preliminary determination and draft PSD permit. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Stan Krivo at 404-562-9123.

Sincerely,



R. Douglas Neeley

Chief

Air and Radiation Technology Branch

Air, Pesticides and Toxics

Management Division

cc: J. Walker, CB  
B. Oven, PPS  
Dural Co  
NED  
NPS  
C. Holladay, BAR



facsimile  
TRANSMITTAL

Mississippi, Tennessee, Alabama, Georgia, Florida, Kentucky,  
South Carolina, North Carolina

To: Mike Halpin  
FDEP

Fax #: 850-922-6979

Subject: Cedar Bay Generating Plant

From: Katy Forney / Jim Little Phone#: 404-562-9130 / 9118

Date: 1-21-00

Pages: 4, including this cover sheet.

COMMENTS:

**EPA** United States Environmental Protection Agency  
Air & Radiation Technology Branch  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW, 12th Floor  
Atlanta, Georgia 30303  
404-562-9105  
Fax: 404-562-9086

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION	)	
CEDAR BAY COGENERATION PROJECT	)	OGC NO. 88-1089
CEDAR BAY COGENERATION, INC.	)	CERTIFICATION NO. PA 88-24B
U.S. GENERATING COMPANY	)	
<hr/>		

CORRECTED FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 18, 1991, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification of the Cedar Bay Cogeneration Project. That certification order approved the construction and operation of a fluidized bed, coal fired cogeneration power plant and associated facilities to be located in Duval County, Florida. The facility is owned by Cedar Bay Generating Co. L.P. of which Cedar Bay Cogeneration, Inc. is a general partner.

On October 31, 1994, CBC filed a request to modify the conditions of certification pursuant to section 403.516(1)(b), Florida Statutes (F.S.). CBC requested relief from conditions controlling emissions from the material handling system and the storage, handling, shipping disposal and reuse of solid wastes produced by the combustion of coal.

Copies of CBC's request were distributed to all parties to the certification proceeding and made available for public review. On March 24, 1995, the Department published a Notice of Intent to Issue the Proposed Modification in the Florida Administrative Weekly. Copies of the intent to issue were sent to all parties to the original proceeding. As of March 23, 1995, all of the parties to the original proceeding had received copies of the intent to issue. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No timely objection to the proposed modifications that are set forth below was received by the Department. The other matters that were addressed in the original modification request and in the Department's proposed order of modification, but that are not further addressed herein, will be addressed in separate orders at a later date.



Accordingly, in the absence of any timely objection, IT IS ORDERED :

The proposed modifications to the Conditions of Certification relating to material handling emissions sources and solid waste disposal at the Cedar Bay Cogeneration Facility are hereby APPROVED. Pursuant to section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Cedar Bay Cogeneration Project as follows:

II. B. 4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building

Coal Silo Conveyor

Limestone Pulverizers(2)/Conveyors

Limestone Storage Bins (2)

Bed Ash Hopper

Bed Ash Separator

Bed Ash Silo Vent

Fly Ash Silo Vent

Fly Ash Separators (2)

Bed Ash Receiver Bin

Fly Ash Receiver Bin

Pellet Vibratory Screen System

Pelletizing Ash-Recycle Tank

Pelletizing Recycle Hopper

Cured Pellet Screening Recycle Conveyor System

Pellet Recycle Conveyor

Pelletizing Rail Loadout

The emissions from the above listed sources are subject to the particulate emission

limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 17-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992+ version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled ~~using wet suppression/removal techniques as follows:~~

~~Coal Car Unloading~~  
Ash Pellet Hydrator: Scrubber  
Ash Pellet Curing Silos: Scrubber  
Ash Pelletizing Pan: Scrubber

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5 percent opacity and 0.01 gr/dscf (applicant-requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992+ version).

c. Fugitive emissions from the following material handling and transport sources shall be controlled as follows:

Coal Car Unloading: Wet Suppression using continuous watersprays during unloading.

Dry Ash Rail Car Loadout:

Using closed or covered containers under negative air pressure during ash loadout; and using water sprays prior to removal of rail car loadout cap when loading open rail cars.

The above listed sources are subject to a visible emissions (VE) limitation requirement of five percent (5%) opacity in accordance with Rule 62-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE using EPA Method 9 or other FDEP approved methods in accordance with Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial visible emission testing shall be conducted within 90 days after final DEP approval of these facilities or within 90 days after completion of construction of the source, whichever occurs last. Ash shipped in open rail cars will either be pelletized or be sprayed with water to create a crust on the top layer of non-pelletized ash. Removal of bottom and fly ash from the Project site by any means other than by rail shall require the prior approval of DEP and RESD of the method(s) of fugitive emissions control.

7. The maximum emissions from each of the Limestone Pulverizers/Conveyors ~~(including limestone dryer) -limestone dryers~~ shall not exceed the following: ~~while using oil shall not exceed the following (based on AP 42 factor, Table 1, 3-1, Industrial Distillate, 10/86)~~

Estimated Limitations

<u>Pollutant</u>	<u>lbs/hr.</u>	<u>TPY</u>	<u>TPY for 2 pulverizers/conveyors dryers</u>
PM/PM10	<u>1.26*</u> <del>0.24</del>	<u>1.68</u> <del>0.32</del>	<u>3.36</u> <del>0.64</del>
SO2	0.85	1.15	2.3
CO	0.60	0.81	1.62
NOx	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO2, CO, NOx, and VOC are based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86).

\* This reflects the emission limitation for the limestone pulverizers/conveyors in Condition II.B.4.a. and limits the emission for the Limestone Pulverizers/Conveyors and the dryer.

Visible emissions from the limestone pulverizers/conveyors dryers shall not exceed 5% opacity.

**IX. SOLID WASTE STORAGE AND DISPOSAL**

CBCP shall be responsible for arranging for the proper storage, handling, disposal, or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the CBCP facility shall be removed from the site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash ~~may will~~ be pelletized, or made into aggregate form, and shall be either shipped by rail back to the mine, or to a permitted disposal area outside Duval County. ~~utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by~~ Ash may be shipped offsite to companies specializing in the marketing and utilization of combustion by-products. Fugitive emissions from storage and handling of ash materials will be controlled in accordance with these conditions and Department

rules. Open rail cars used to ship dry ash will be sealed to prevent leaks of ash during transport. There shall be no outside storage of CFB ash prior to pelletization or loadout of ash to sealed rail cars for removal from the site. The bottom ash and fly ash shall not be disposed of in a landfill within Duval County. If the CBCP decides to dispose of the bottom ash or fly ash by other than returning it to the mine site or a permitted disposal site outside Duval county, they shall notify RESD and DEP. Subsequent changes to the ash pelletization system which result in new or modified emissions sources or discharges shall require submittal of a request for modification of this certification, in accordance with section 403.516,F.S.

The remainder of Condition IX remains the same.

Any party to this Order has the right to seek judicial review of the Order pursuant to section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 29<sup>th</sup> day of Sept., 1995 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

**FILING AND ACKNOWLEDGEMENT**  
**FILED, on this date, pursuant to S120.52**  
**Florida Statutes, with the designated**  
**Department Clerk, receipt of which**  
**is hereby acknowledged.**

Roberta Brown 10-9-95  
Clerk Date

Virginia B. Wetherell  
for VIRGINIA B. WETHERELL  
Secretary  
Marjory Stoneman Douglas Bldg.  
3900 Commonwealth Boulevard  
Tallahassee, FL 32399-3000  
(904) 488-4805

CERTIFICATE OF SERVICE

I DO HEREBY CERTIFY that a true and correct copy of the foregoing document has been sent by U.S. Mail to the following listed persons:

Doug Roberts, Esq.  
Hopping Green Sams & Smith  
P O Box 6526  
Tallahassee FL 32314

Gregory K. Radlinski, Esq.  
City of Jacksonville  
600 City Hall  
220 E Bay St  
Jacksonville FL 32202

Terry Cole, Esq.  
Scott Shirley, Esq.  
Oertel Hoffman Fernandez & Cole  
P O Box 6507  
Tallahassee FL 32314-6507

Nancy B. Barnard, Esq.  
St. Johns River Water  
Management District  
P.O. Box 1429  
Palatka, FL 32178-1429

Jim Antista, General Counsel  
Florida Game & Fresh Water  
Fish Commission  
620 S Meridian Rd  
Tallahassee FL 32399-1600

Rob Vandiver, General Counsel  
Mike Palecki, Esquire  
Bureau of Electric & Gas  
Florida Public Service Comm.  
2540 Shumard Oak Blvd.  
Tallahassee FL 32399-0850

David Russ, Esq.  
Department of Community Affairs  
2740 Centerview Dr  
Tallahassee FL 32399-2100

James A. Heard, Esq.  
4741 Atlantic Blvd., Ste. C  
Jacksonville FL 32207

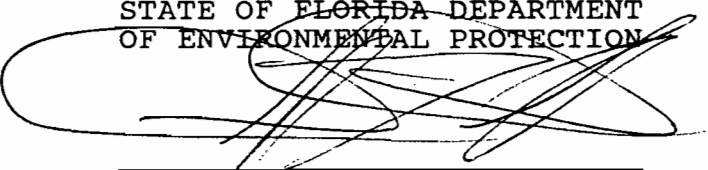
Earl M. Barker, Esq.  
Slott & Barker  
334 East Duval St  
Jacksonville, FL 32302

Lisa B. Cooper, Esq.  
Margol & Pennington  
76 Laura St  
Jacksonville FL 32202

Lawrence N. Curtin, Esq.  
Holland & Knight  
P O Drawer 810  
Tallahassee FL 32302

this 9<sup>th</sup> day of October, 1995.

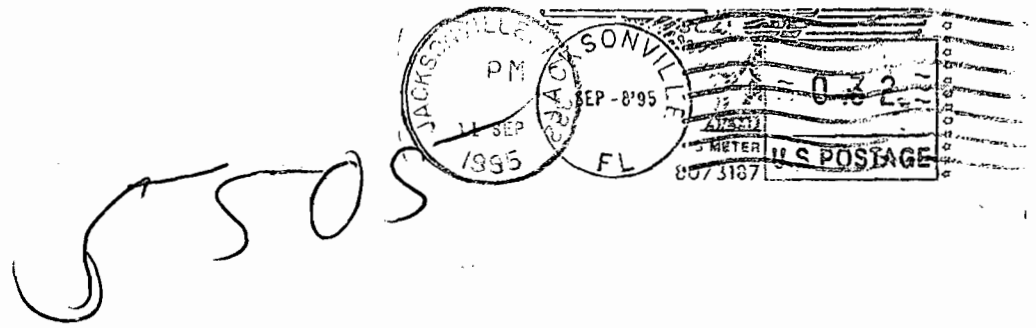
STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
CHARLES T. "CHIP" COLLETTE  
Assistant General Counsel

Twin Towers Office Bldg.  
2600 Blair Stone Rd.  
Tallahassee FL 32399-2400  
904/488-9730


**Cedar Bay Generating Company  
Limited Partnership**

P.O. Box 26324  
9640 Eastport Road  
Jacksonville, FL 32226-6324



Bruce Mitchell  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400



 32399-2400



**RECEIVED**  
**Cedar Bay Generating Company**  
**Limited Partnership**

SEP 14 1995

September 8, 1995

Bureau of  
Air Regulation

File No.: 6.3.1.6

Clair Fancy, Chief  
Bureau of Environmental Regulation  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Hamilton S. Oven  
Office of Siting Coordination  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Cedar Bay Generating Company, LP  
Cedar Bay Cogeneration Project  
PSD-FL137B - Duval County

Dear Mr. Fancy:

On behalf of the Cedar Bay Generating Company (CBGC), I write to request that the Department of Environmental Protection (DEP) confirm its interpretation of the conditions of site certification and the separate PSD permit for the Cedar Bay Cogeneration Project (CBCP) to clarify the intent of those two documents regarding one issue. The Site Certificate was originally issued on February 11, 1991, and modified on May 11, 1993. The PSD Permit was originally issued on March 29, 1991, and subsequently amended on November 23, 1993 (PSD-FL-137A.) and on August 8, 1995 (PSD-FL-137B) This letter addresses the allowed operation of the Absorber Dryer System.

Based on the design and modeling and the intended construction and operation of the limestone pulverizer/conveyers system (generally referred to as the absorber dryer system (ADS)) at the CBCP, the ADS has two parallel trains of absorber crushers and dryers. Both trains draw aragonite (a calcium rich material similar in composition to limestone) from a common storage pile and discharge into hoppers. To ensure compliance with applicable requirements, the operation of the two trains in the ADS were limited to running at maximum capacity for a total of [8 hours times 2 trains] per day on annual average and of [11 hours times 2 trains] per day at peak operation. Thus, a total of 16 and 22 train-hours daily of maximum capacity operation in the ADS on average and peak, respectively, was authorized under the certification and the PSD permit. Moreover, the permitting of the ADS did not distinguish as to whether one ADS train ran for 100% of the allowable train-hours in a day or that the two trains ran in any combination totaling together 100% of the allowable train-hours in a year or day. Accordingly, the Material Handling and Treatment section of the certification (specific condition II.B.1) and the PSD permit (specific condition II.B.1) provided that:





“The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continually, i.e. 8760 hrs/yr except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.”

In addition, the condition II.B.7 provided that the emissions of SO<sub>2</sub>, for example, from one train in the ADS was to be 1.15 TPY for SO<sub>2</sub> and 2.3 TPY for both trains.

The purpose of this letter is to confirm the Department’s interpretation of this provision of the site certification and the PSD permit to remove any ambiguity that might be read into this language. Specifically, we understood that the Department interprets this provision as follows:

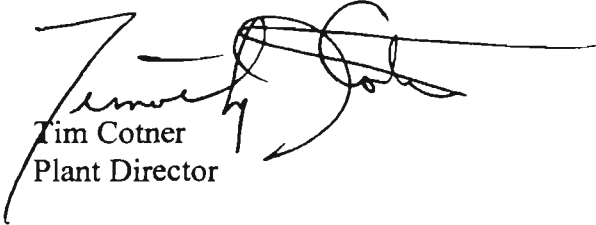
“The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, ~~limestone dryer~~ the Absorber Dryer System including two absorber crusher/dryer trains, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 7860 hrs/yr ~~except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920)~~ except that the two absorber crusher dryer trains may be operated in any combination for maximum of 22 train-hours per day (maximum of 5840 train-hrs/yr) at maximum capacity.”

This interpretation does not refer to or allow any change in the operation of the ADS. It better describes allowable operations. As a result, there is no change in emissions or ambient impacts.

CBGC believes that this accurately reflects the discussions we have had with you and your staff on this interpretation of the approvals. If you disagree with this interpretation, please advise me promptly. CBGC will proceed to act in reliance on this interpretation until otherwise advised. Your attention to this matter is appreciated. Should you or your staff have any questions on this matter, please do not hesitate to contact me or Kevin Grant at (904) 751-4000.



Sincerely,



Tim Cotner  
Plant Director

DB/mm

cc: Hamilton S, Oven, DEP Office of Siting Coordination  
Steve Pace, City of Jacksonville RESD  
**Bruce Mitchell, DEP BAR**  
Charles T. Collette, DEP Office of General Counsel



**Cedar Bay Generating Company  
Limited Partnership**

RECEIVED

SEP 14 1995

September 8, 1995

File No.: 6.3.1.6

Bureau of  
Air Regulation

Clair Fancy, Chief  
Bureau of Environmental Regulation  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Hamilton S. Oven  
Office of Siting Coordination  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Cedar Bay Generating Company, LP  
Cedar Bay Cogeneration Project  
PSD-FL137B - Duval County

Dear Mr. Fancy:

On behalf of the Cedar Bay Generating Company (CBGC), I write to request that the Department of Environmental Protection (DEP) confirm its interpretation of the conditions of site certification and the separate PSD permit for the Cedar Bay Cogeneration Project (CBCP) to clarify the intent of those two documents regarding one issue. The Site Certificate was originally issued on February 11, 1991, and modified on May 11, 1993. The PSD Permit was originally issued on March 29, 1991, and subsequently amended on November 23, 1993 (PSD-FL-137A.) and on August 8, 1995 (PSD-FL-137B) This letter addresses the allowed operation of the Absorber Dryer System.

Based on the design and modeling and the intended construction and operation of the limestone pulverizer/conveyers system (generally referred to as the absorber dryer system (ADS)) at the CBCP, the ADS has two parallel trains of absorber crushers and dryers. Both trains draw aragonite (a calcium rich material similar in composition to limestone) from a common storage pile and discharge into hoppers. To ensure compliance with applicable requirements, the operation of the two trains in the ADS were limited to running at maximum capacity for a total of [8 hours times 2 trains] per day on annual average and of [11 hours times 2 trains] per day at peak operation. Thus, a total of 16 and 22 train-hours daily of maximum capacity operation in the ADS on average and peak, respectively, was authorized under the certification and the PSD permit. Moreover, the permitting of the ADS did not distinguish as to whether one ADS train ran for 100% of the allowable train-hours in a day or that the two trains ran in any combination totaling together 100% of the allowable train-hours in a year or day. Accordingly, the Material Handling and Treatment section of the certification (specific condition II.B.1) and the PSD permit (specific condition II.B.1) provided that:



“The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continually, i.e. 8760 hrs/yr except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.”

In addition, the condition II.B.7 provided that the emissions of SO<sub>2</sub>, for example, from one train in the ADS was to be 1.15 TPY for SO<sub>2</sub> and 2.3 TPY for both trains.

The purpose of this letter is to confirm the Department’s interpretation of this provision of the site certification and the PSD permit to remove any ambiguity that might be read into this language. Specifically, we understood that the Department interprets this provision as follows:

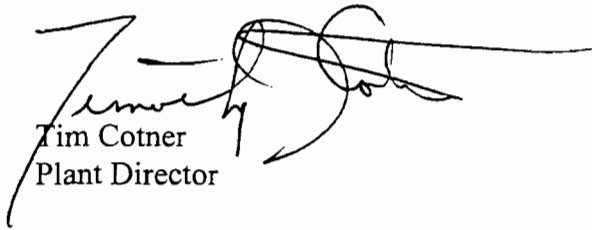
“The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, ~~limestone dryer~~ the Absorber Dryer System including two absorber crusher/dryer trains, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. ~~8760 hrs/yr~~ 8760 hrs/yr except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920, except that the two absorber crusher dryer trains may be operated in any combination for maximum of 22 train-hours per day (maximum of 5840 train-hrs/yr) at maximum capacity.”

This interpretation does not refer to or allow any change in the operation of the ADS. It better describes allowable operations. As a result, there is no change in emissions or ambient impacts.

CBGC believes that this accurately reflects the discussions we have had with you and your staff on this interpretation of the approvals. If you disagree with this interpretation, please advise me promptly. CBGC will proceed to act in reliance on this interpretation until otherwise advised. Your attention to this matter is appreciated. Should you or your staff have any questions on this matter, please do not hesitate to contact me or Kevin Grant at (904) 751-4000.



Sincerely,



Tim Cotner  
Plant Director

DB/mm

cc: Hamilton S, Oven, DEP Office of Siting Coordination  
Steve Pace, City of Jacksonville RESD  
Bruce Mitchell, DEP BAR  
Charles T. Collette, DEP Office of General Counsel

cc: NED  
EPA  
NPS  
D. Roberts, HGS&S  
S. Arif, BAR  
A. Linero, BAR



**Kent L. Fickett**

*Vice President Environmental, Health, Safety & Regulatory Affairs*

**U.S. Generating Company**

September 1, 1995

Mr. Bruce Mitchell  
Air Regulations  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399

**RECEIVED**

SEP 15 1995

Bureau of  
Air Regulation

Dear Mr. Mitchell:

We would like to notify you of a change in the contact person and address for communications from your office regarding Cedar Bay Generating Company, and our environmental permitting and regulatory responsibilities for the Cedar Bay Generating Project. Beginning immediately, please address correspondence pertaining to permitting, regulatory or enforcement issues to:

Mr. Timothy J. Cotner  
Plant Director  
Cedar Bay Generating Plant  
P.O. Box 26324  
Jacksonville, Florida 32226  
(904) 751-4000

If possible, please send a copy of all correspondence to Mr. Kevin Grant, Manager, Environmental Health and Safety, at the same address above, and a copy to:

Mr. Don Beckham  
Manager, Environmental Compliance  
7500 Old Georgetown Road  
13th Floor  
Bethesda, Maryland 20814-6161  
(301) 718-6757

If you have any questions, please feel free to contact Mr. Beckham.

Sincerely,



Kent Fickett



~~John Brown~~  
Bruce INFO  
AL Linnno File

Kent L. Fickett  
Vice President Environmental, Health, Safety & Regulatory Affairs

U.S. Generating Company

NORTHEAST DISTRICT  
RECEIVED  
SEP 13 1995  
DEP-JACKSONVILLE

September 1, 1995

Mr. Morton Benjamin  
Northeast District  
Florida Department of Environmental Protection  
7825 Baymeadows Way  
Suite B200  
Jacksonville, Florida 32256

Dear Mr. Benjamin:

We would like to notify you of a change in the contact person and address for communications from your office regarding Cedar Bay Generating Company, and our environmental permitting and regulatory responsibilities for the Cedar Bay Generating Project. Beginning immediately, please address correspondence pertaining to permitting, regulatory or enforcement issues to:

Mr. Timothy J. Cotner  
Plant Director  
Cedar Bay Generating Plant  
P.O. Box 26324  
Jacksonville, Florida 32226  
(904) 751-4000

If possible, please send a copy of all correspondence to Mr. Kevin Grant, Manager, Environmental Health and Safety, at the same address above, and a copy to:

Mr. Don Beckham  
Manager, Environmental Compliance  
7500 Old Georgetown Road  
13th Floor  
Bethesda, Maryland 20814-6161  
(301) 718-6757

If you have any questions, please feel free to contact Mr. Beckham.

Sincerely,

Kent Fickett



Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
*Kent L. Fickett  
 Cedar Bay Generating Co. LP.  
 7500 Old Georgetown Rd  
 Bethesda, MD 20814*

4a. Article Number  
*Z 392 979 013*

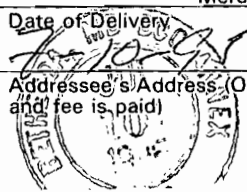
4b. Service Type  
 Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)  
*Kent L. Fickett*

6. Signature (Agent)



PS Form 3811, December 1991

U.S. GPO: 1993-352-714

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 979 013



**Receipt for Certified Mail**

No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

PS Form 3800, March 1993

Sent to	<i>Kent L. Fickett</i>
Street and No.	<i>Cedar Bay</i>
P.O., State and ZIP Code	<i>Bethesda, MD</i>
Postage	\$
Certified Fee	
Special Delivery Fee?	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>7-5-95</i>
<i>PSD-FI-137(CB) Duval Co.</i>	





# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

June 30, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

Dear Mr. Fickett:

Enclosed is a proposed amendment letter and Public Notice for the Cedar Bay Cogeneration Project located in Duval County, Florida. You are required to do a public notice for this amendment. All comments during the public notice period should be addressed to Mr. A.A. Linero at the Department's Tallahassee address.

If there are additional questions on the above, please call Mr. Syed Arif at (904) 488-1344.

Sincerely,

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

CHF/sa/t

cc: C. Kirts, NED  
S. Pace, RESD  
H. Oven, PPS  
J. Harper, EPA  
J. Bunyak, NPS  
D. Roberts, HGS&S

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an  
Application for Permit by:

DEP File No. PSD-FL-137(B)  
Duval County

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

---

INTENT TO ISSUE PERMIT AMENDMENT

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment (copy attached) to the applicant as detailed in the application/request specified above for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Cedar Bay Generating Company, L.P., submitted an application on May 12, 1995, to the Department for a permit amendment to Cedar Bay Cogeneration Project's permit. The facility is located in Duval County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a permit amendment is required for the proposed work.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit Amendment. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "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. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit amendment.

The Department will issue the permit amendment with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,


(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to

request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



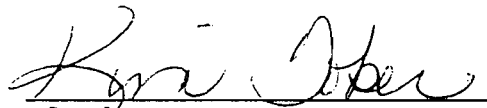
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399  
904-488-1344

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE PERMIT AMENDMENT all copies were mailed by certified mail before the close of business on 7-5-95 to the listed persons.

Clerk Stamp

**FILING AND ACKNOWLEDGMENT**  
FILED, on this date, pursuant to  
§120.52(11), Florida Statutes,  
with the designated Department  
Clerk, receipt of which is hereby  
acknowledged.

  
Clerk 7-5-95  
Date

Copies furnished to:

- C. Kirts, NED
- H. Oven, PPS
- S. Pace, RESD
- J. Harper, EPA
- J. Bunyak, NPS
- D. Roberts, HGS&S

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT

PSD-FL-137(B)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, Maryland 20814. This facility consists of three circulating fluidized bed coal-fired boilers, associated coal, ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and fugitive emissions associated with the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site. The increase in emission due to the amendment is less than 3 tons per year of particulate matter.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request 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  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301

Department of Environmental Protection  
Northeast District  
Suite 200B  
7825 Baymeadows Way  
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.



# Department of Environmental Protection

# DRAFT

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

July XX, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

Dear Mr. Fickett:

RE: Request for Permit Amendment  
Cedar Bay Cogeneration Project  
PSD-FL-137(B); Duval County

The Department received your request of May 12, 1995, to make minor amendments to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizer/conveyor for the above referenced PSD permit. The permit's specific conditions are amended as shown:

- II. B. 4. Material handling sources shall be regulated as follows:
- a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:
    - Coal Crusher Building
    - Coal Silo Conveyor
    - Limestone Pulverizer/Conveyors
    - Limestone Storage Bins (2)
    - Bed Ash Hopper
    - Bed Ash Separator
    - Bed Ash Silo Vent
    - Fly Ash Silo Vent
    - Fly Ash Separators (2)
    - Bed Ash Receiver Bin
    - Pellet Vibratory Screen System
    - ~~Pelletizing-Ash~~ Recycle Tank
    - ~~Pelletizing-Reeyele~~-Hopper
    - Cured Pellet Screening Reeyele Conveyor System
    - Pellet Recycle Conveyor
    - Pelletizing Rail Loadout

# DRAFT

Mr. Kent Fickett  
July XX, 1995  
Page Two

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 17-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- b. The PM emissions from the following process equipment, and/or facility equipment, in the material handling and treatment area sources shall be controlled using-wet suppression/removal-techniques as follows:

<u>Coal-Car-Unloading</u>	
Ash Pellet Hydrator:	<u>Scrubber</u>
Ash Pellet Curing Silos:	<u>Scrubber</u>
Ash Pelletizing Pan:	<u>Scrubber</u>

The above listed sources are subject to a visible emissions (VE) and a particulate matter (PM) emissions limitation requirement of 5 percent % opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM emissions using EPA Methods 9 and 5, respectively, in accordance with Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- c. Fugitive emissions from the following material handling and transport sources shall be controlled as follows:

Coal Car Unloading: Wet Suppression using continuous water sprays during unloading.

Dry Ash Rail Car Loadout: Using closed or covered containers under negative air pressures during ash loadout; and using water sprays prior to removal of rail car loadout cap when loading open rail cars.



DRAFT

Mr. Kent Fickett  
July XX, 1995  
Page Three

The above listed sources are subject to a visible emission (VE) limitation requirement of five percent (5%) opacity in accordance with Rule 62-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE using EPA Method 9 or other FDEP approved methods in accordance with Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial visible emission testing shall be conducted within 90 days after final DEP approval of these facilities or within 90 days after completion of construction of the source, whichever occurs last. Ash shipped in open rail cars will either be pelletized or be sprayed with water to create a crust on the top layer of non-pelletized ash. Removal of bottom and fly ash from the Project site by any means other than by rail shall require the prior approval of DEP and RESD of the method(s) of fugitive emissions control.

7. The maximum emissions from each of the Limestone Pulverizer/Conveyors (including limestone dryer) limestone-dryers shall not exceed the following: white-using-oil-shall-not-exceed the-following-(based-on-AP-42-factor, Table 1, 3-1, Industrial Distillate, 10/86)

Estimated Limitations

<u>Pollutant</u>	<u>lbs/hr</u>	<u>TPY</u>	<u>TPY for 2 Pulverizer/Conveyors</u>	<u>Dryers</u>		
PM/PM <sub>10</sub>	<u>1.26*</u>	<u>0-24</u>	<u>1.68</u>	<u>0-32</u>	<u>3.36</u>	<u>0-64</u>
SO <sub>2</sub>	0.85		1.15		2.3	
CO	0.60		0.81		1.62	
NO <sub>x</sub>	2.40		3.25		6.5	
VOC	0.05		0.06		0.12	

The emissions for SO<sub>2</sub>, CO, NO<sub>x</sub>, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

\* This reflects the emission limitation for the limestone pulverizer/conveyor in Condition II.B.4.a. and limits the emission for the Limestone Pulverizer/Conveyor and the dryer.

Visible emissions from the limestone pulverizer/conveyors dryers shall not exceed 5% opacity.

# DRAFT

Mr. Kent Fickett  
July XX, 1995  
Page Four

A copy of this letter shall be attached to the above mentioned permit, No. PSD-FL-137(B), and shall become a part of the permit.

Sincerely,

Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sa/t

cc: C. Kirts, NED  
S. Pace, RESD  
H. Oven, PPS  
J. Harper, EPA  
J. Bunyak, NPS  
D. Roberts, HGS&S

**HOPPING GREEN SAMS & SMITH**

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 425-3415

July 19, 1995

JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN BLIZZARD  
ELIZABETH C. BOWMAN  
RICHARD S. BRIGHTMAN  
PETER C. CUNNINGHAM  
RALPH A. DEMEO  
THOMAS M. DEROSE  
WILLIAM H. GREEN  
WADE L. HOPPING  
FRANK E. MATTHEWS  
RICHARD D. MELSON  
DAVID L. POWELL  
WILLIAM D. PRESTON  
CAROLYN S. RAEPPLE  
GARY P. SAMS  
ROBERT P. SMITH  
CHERYL G. STUART

KRISTIN M. CONROY  
CONNIE C. DURRENCE  
JONATHAN S. FOX  
JAMES C. GOODLETT  
GARY K. HUNTER, JR.  
JONATHAN T. JOHNSON  
ROBERT A. MANNING  
ANGELA R. MORRISON  
GARY V. PERKO  
KAREN M. PETERSON  
MICHAEL P. PETROVICH  
DOUGLAS S. ROBERTS  
LISA K. RUSHTON  
R. SCOTT RUTH  
JULIE R. STEINMEYER

OF COUNSEL  
CARLOS ALVAREZ  
W. ROBERT FOKES

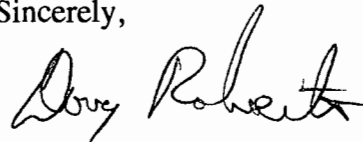
Mr. Syed Arif  
Bureau of Air Regulation  
Department of Environmental Protection  
Magnolia Plaza  
Tallahassee, FL 32399

Re: Cedar Bay Cogeneration Project,  
Notice of PSD Permit Amendment,  
Permit No. PSD-FL-137(B)

Dear Syed:

Attached for your records is the original Proof of Publication for the Notice of Intent to Issue Permit Amendment which was published in the Monday, July 17, 1995 edition of the Jacksonville Times Union.

Sincerely,



Douglas S. Roberts

DSR/gs

cc: Mark Carney, U.S. Generating Co.  
Sanford Hartman, U.S. Generating Co.

CC: NED  
EPA  
NPS  
Cleve Holladay, BAR

**HOPPING GREEN SAMS & SMITH**

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 425-3415

July 18, 1995

JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN BLIZZARD  
ELIZABETH C. BOWMAN  
RICHARD S. BRIGHTMAN  
PETER C. CUNNINGHAM  
RALPH A. DEMEO  
THOMAS M. DEROSE  
WILLIAM H. GREEN  
WADE L. HOPPING  
FRANK E. MATTHEWS  
RICHARD D. MELSON  
DAVID L. POWELL  
WILLIAM D. PRESTON  
CAROLYN S. RAEPPLER  
GARY P. SAMS  
ROBERT P. SMITH  
CHERYL G. STUART

KRISTIN M. CONROY  
CONNIE C. DURRENCE  
JONATHAN S. FOX  
JAMES C. GOODLETT  
GARY K. HUNTER, JR.  
JONATHAN T. JOHNSON  
ROBERT A. MANNING  
ANGELA R. MORRISON  
GARY V. PERKO  
KAREN M. PETERSON  
MICHAEL P. PETROVICH  
DOUGLAS S. ROBERTS  
LISA K. RUSHTON  
R. SCOTT RUTH  
JULIE R. STEINMEYER  
  
OF COUNSEL  
CARLOS ALVAREZ  
W. ROBERT FOKES

Mr. Syed Arif  
Bureau of Air Regulation  
Department of Environmental Protection  
Magnolia Plaza  
Tallahassee, FL 32399

RECEIVED  
JUL 19 1995

Bureau of  
Air Regulation

Re: Cedar Bay Cogeneration Project,  
Notice of PSD Permit Amendment,  
Permit No. PSD-FL-137(B)

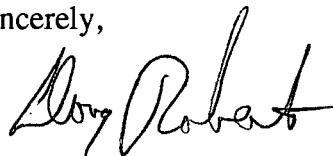
Dear Syed:

Attached for your reference is the Notice of Intent to Issue Permit Amendment which is to be published in the Monday, July 17, 1995 edition of the Jacksonville Times Union. We will provide a proof of publication as quickly as it is received, as required by your notice.

As we discussed, the notice has been revised to strike the last sentence of the original notice prepared by you, to delete the reference to an increase in emissions of less than 3 tons per year of particulate matter. This permit amendment will result in no increase in particulate matter. The permit changes combined two previously established emissions limits into one single emission limit, and thereby, did not increase overall PM emissions. You agreed that, based on this understanding, the last sentence could be omitted from the notice.

We appreciate your continuing cooperation in this matter. Should you have any questions, please contact either Mark Carney at U.S. Generating Co. (301-718-6899) or me.

Sincerely,



Douglas S. Roberts

DSR/gs

cc: Hamilton S. Oven, DEP  
Steve Pace, RESD  
Mark Carney, U.S. Generating Co.  
Sandy Hartman, U.S. Generating Co.

CC NED  
EPA  
NPS  
Cleve H. -BAR

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT

PSD-FL-137(B)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, Maryland 20814. This facility consists of three circulating fluidized bed coal-fired boilers, associated coal, ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and fugitive emissions associated with the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes

a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request 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  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301

Department of Environmental Protection  
Northeast District  
Suite 200B  
7825 Baymeadows Way  
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

August 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road - 13th Floor  
Bethesda, Maryland 20814

Dear Mr. Fickett:

RE: Request for Permit Amendment  
Cedar Bay Cogeneration Project  
PSD-FL-137(B); Duval County

The Department received your request of May 12, 1995, to make minor amendments to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizer/conveyor for the above referenced PSD permit. The permit's specific conditions are amended as shown:

II. B. 4. Material handling sources shall be regulated as follows:

- a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building  
Coal Silo Conveyor  
Limestone Pulverizers (2) /Conveyors  
Limestone Storage Bins (2)  
Bed Ash Hopper  
Bed Ash Separator  
Bed Ash Silo Vent  
Fly Ash Silo Vent  
Fly Ash Separators (2)  
Bed Ash Receiver Bin  
Fly Ash Receiver Bin  
Pellet Vibratory Screen System  
Pelletizing-Ash Recycle Tank  
Pelletizing-Recycle-Hopper  
Cured Pellet Screening Recycle Conveyor System  
Pellet Recycle Conveyor  
Pelletizing Rail Loadout

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*



Mr. Kent Fickett  
August 8, 1995  
Page Two

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 17-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- b. The PM emissions from the following process equipment, and/or facility equipment, in the material handling and treatment area sources shall be controlled using-wet suppression/removal-techniques as follows:

Coal-Car-Unloading	
Ash Pellet Hydrator:	<u>Scrubber</u>
Ash Pellet Curing Silos:	<u>Scrubber</u>
Ash Pelletizing Pan:	<u>Scrubber</u>

The above listed sources are subject to a visible emissions (VE) and a particulate matter (PM) emissions limitation requirement of 5 percent % opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM emissions using EPA Methods 9 and 5, respectively, in accordance with Rule 62 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

- c. Fugitive emissions from the following material handling and transport sources shall be controlled as follows:

Coal Car Unloading: Wet Suppression using continuous water sprays during unloading.

Dry Ash Rail Car Loadout: Using closed or covered containers under negative air pressures during ash loadout; and using water sprays prior to removal of rail car loadout cap when loading open rail cars.

Mr. Kent Fickett  
 August 8, 1995  
 Page Three

The above listed sources are subject to a visible emission (VE) limitation requirement of five percent (5%) opacity in accordance with Rule 62-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE using EPA Method 9 or other FDEP approved methods in accordance with Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial visible emission testing shall be conducted within 90 days after final DEP approval of these facilities or within 90 days after completion of construction of the source, whichever occurs last. Ash shipped in open rail cars will either be pelletized or be sprayed with water to create a crust on the top layer of non-pelletized ash. Removal of bottom and fly ash from the Project site by any means other than by rail shall require the prior approval of DEP and RESD of the method(s) of fugitive emissions control.

7. The maximum emissions from each of the Limestone Pulverizers/Conveyors (including limestone dryer) limestone dryers shall not exceed the following: ~~while-using-oil-shall-not exceed-the-following-(based-on-AP-42-factor, Table 1, 3-1, Industrial-Distillate, 10/86)~~

Estimated Limitations

<u>Pollutant</u>	<u>lbs/hr</u> <u>Dryers</u>	<u>TPY</u>	<u>TPY for 2 Pulverizers/Conveyors</u>
PM/PM <sub>10</sub>	1.26* 0-24	1.68 0-32	3.36 0-64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO <sub>x</sub>	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO<sub>2</sub>, CO, NO<sub>x</sub>, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

\* This reflects the emission limitation for the limestone pulverizers/conveyor in Condition II.B.4.a. and limits the emission for the Limestone Pulverizers/Conveyors and the dryer.

Visible emissions from the limestone pulverizers/conveyors dryers shall not exceed 5% opacity.

Mr. Kent Fickett  
August 8, 1995  
Page Four

A copy of this letter shall be attached to the above mentioned permit, No. PSD-FL-137(B), and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sa/t

cc: C. Kirts, NED  
S. Pace, RESD  
H. Oven, PPS  
J. Harper, EPA  
J. Bunyak, NPS  
D. Roberts, HGS&S

## Final Determination

The permit amendment to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizers/conveyors for Cedar Bay Cogeneration, located in Duval County, Florida, was distributed on July 5, 1995. The Notice of Intent to Issue was published in the Florida Times Union on July 17, 1995. Copies of the amendment were available for public inspection at the Department Offices in Jacksonville and Tallahassee.

No comments were submitted by the National Park Service and the U.S. Environmental Protection Agency. Comments were submitted by the applicant relating to typographical errors in the draft permit amendment. The Department agrees with those findings by the applicant, and appropriate changes were made.

The final action of the Department will be to issue the PSD permit (PSD-FL-137B) with the changes noted above.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 Kent L. Gickott  
 Cedar Bay Generating Co.  
 17500 Old Georgetown Rd  
 Bethesda, Maryland

4a. Article Number  
 Z 392 979 019

4b. Service Type  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

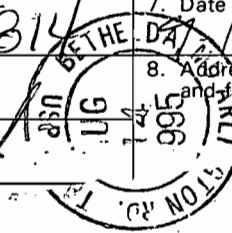
7. Date of Delivery  
 20814  
 DATE 19-95

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991



Thank you for using Return Receipt Service.

Z 392 979 019



**Receipt for Certified Mail**

No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

PS Form 3800, March 1993

Sent to	Kent Gickott
Street and No.	Cedar Bay Gen. Co.
City, State and ZIP Code	Bethesda, MD
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark of Date	PSD-FI-137CB 88-95



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Virginia B. Wetherell  
Secretary

April 22, 1994

Mr. Barrett Parker  
U.S. Generating Company  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-1616

Re: Cedar Bay Cogeneration Project, PA 88-24

Dear Mr. Parker:

The Department of Environmental Protection has reviewed the request for extension of the alternative flyash disposal procedure for the Cedar Bay Cogeneration facility as outlined in your letter of April 15, 1994. The alternate flyash disposal procedure may be used for a period not to exceed 160 days from April 24, 1994, otherwise until October 1, 1994. Please have Mr. Stallwood or other plant person to inform the Jacksonville Regulatory and Environmental Services Division when flyash loading and shipment is to take place.

Sincerely,

*Hamilton S. Oven*

Hamilton S. Oven, P.E.  
Administrator, Siting  
Coordination Office

cc: Ernie Frey, DEP/NED  
Alton W. Yates, RESD  
Clair Fancy, DEP/BAR



# Florida Department of Environmental Protection

Lawton Chiles  
Governor

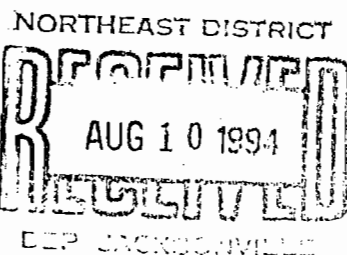
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7577

Virginia B. Wetherell  
Secretary

## NOTICE OF PERMIT SURRENDER

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. John L. West, General Manager  
Seminole Kraft Corporation  
P.O. Box 26998  
Jacksonville, FL 32218-0998



Re: Duval County - Air Pollution  
Power Boiler Nos. 1, 2, 3, Bark Boiler Nos. 1, 2  
Permit Nos. AO16-228848, AO16-228449, AO16-228451  
AO16-225702, AO16-225701  
I.D. Nos. 31-16-0067-06, 31-16-0067-07, 31-16-0067-08  
31-16-0067-04, 31-16-0067-05

Dear Mr. West:


The City of Jacksonville Regulatory and Environmental Services Department (RESD) Air Quality Division (AQD) and the State of Florida Department of Environmental Protection (DEP) have approved the surrender of the referenced permits effective July 22, 1994.

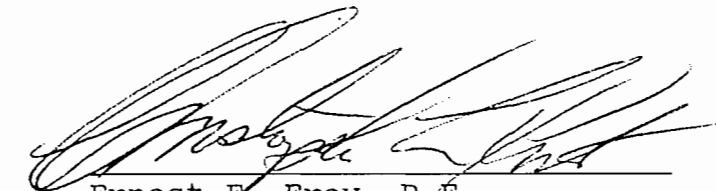
AQD and DEP will accept the surrender of the referenced permits as authorized by Florida Administrative Code (F.A.C.) Rule 17-4.100(1) and Section 403.061(14) Florida Statutes (F.S.). Please attach this Notice of Permit Surrender to your copy of the permits.

Executed in Jacksonville, Florida

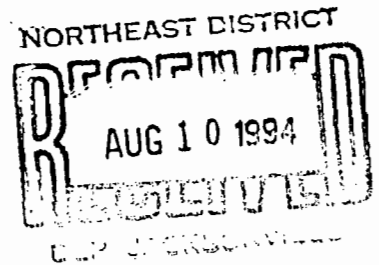
City of Jacksonville  
Regulatory and Environmental  
Services Department  
Air Quality Division

State of Florida  
Department of Environmental  
Protection

  
Robert S. Pace, P.E.,  
Division Chief

  
Ernest E. Frey, P.E.  
Director of District Management

Mr. John L. West  
General Manager  
Seminole Kraft Corporation  
Page 2



Attachment to be Incorporated  
Seminole Kraft Corporation letter dated July 22, 1994

c: Mr. Robert Leetch, P.E., DEP/NED  
Mr. Bruce Mitchell, DEP/BAR/TALLA  
Mr. Jerry Woosley, AQD  
Mr. Wayne Tutt, AQD  
AQD Air Permitting File  
AQD File 2155 C,D,E,I,J,Y  
AQD File 1065-C

Disk: S:/Roberson/E-permit/Boilers5

cc'd: John Brown } 8/24/94  
Clair Farney } Pan  
Buck Owen } 8/26/94

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT SURRENDER and all copies were mailed by certified mail before the close of business on 8/22/94 to the listed persons.

**FILING AND ACKNOWLEDGEMENT**  
FRED, on this date, pursuant to §120.82 Florida  
Statutes, with the designated Department Clerk,  
receipt of which is hereby acknowledged.  
Finda Bratton 8/22/94  
Clerk Date





File Copy

# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

July 5, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Cogeneration Company, L.P.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

Dear Mr. Fickett:

RE: Letter Acknowledging Second Public Notice for PSD-FL-137A

The Department has received Mr. Barrett Parker's correspondence dated June 23, 1994, and the accompanied Public Notice that was published on March 24, 1994, in the Florida Times-Union paper. Based on a research of the Department's and Duval County's files, there have been no requests/petitions filed for any administrative hearings with either Offices of General Counsel during the allotted timeframe spelled out in the Public Notice. Since there were no comments received on the Public Notice and there are no changes needed to be made to the permit that would prompt a resigning of it, then the Department acknowledges the renoticing and there is no further action planned regarding the existing revised/amended permit, No. PSD-FL-137A.

In addition, a typographical error on the cover page is acknowledged by this letter and was identified by Duval County's RESD after the revised/amended permit (PSD-FL-137A) was signed on November 23, 1993, but within the appeal timeframe spelled out on the cover letter conveying the signed permit to the permittee/company; and, this issue was immediately discussed with Mr. Barrett Parker by Mr. Bruce Mitchell. The change is as follows:

Cover Page: 1st sentence, 3rd paragraph:

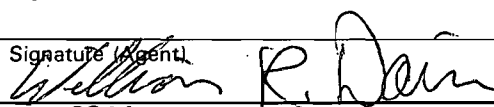

From: The three CFB boilers, each rated at a maximum of 3,189 MMBtu/hr heat input, will fire fuel made up largely or exclusively of coal.

TO: The three CFB boilers, each rated at a maximum of 1,063 MMBtu/hr heat input, will fire fuel made up largely or exclusively of coal.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> <ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Kent L. Fickett Cedar Bay Cogeneration Company, L.P. 7500 Old Georgetown Road Bethesda, Maryland 20814		4a. Article Number P 872 562 693	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 7-11-94	
5. Signature (Addressee)  		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) 			

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 \*U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

P 872 562 693



**Receipt for Certified Mail**

No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

Sent to Mr. Kent L. Fickett	
Street and No. 7500 Old Georgetown Road	
P.O., State, and ZIP Code Bethesda, Maryland 20814	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 7/6/94 PSD-FL-137A	

PS Form 3800, JUNE 1991

Mr. Kent L. Fickett  
◦ Letter Acknowledging Second Public Notice for PSD-FL-137A  
July 5, 1994  
Page 2

If there are any questions, please give Mr. Bruce Mitchell a call at  
(904)488-1344 or write to me at the above address.

Sincerely,



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

CHF/rbm

Attachments

cc: C. Kirts, NED  
S. Pace, RESD  
R. Donelan, Esq., DEP  
J. Braswell, Esq., DEP  
B. Parker, USGC  
F. Harger, EPA  
F. Bunyak, NPS  
Buck Owen, PPS

} 7/5/94 Ran



# Florida Department of Environmental Protection

Lawton Chiles  
Governor

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Virginia B. Wetherell  
Secretary

RECEIVED

August 1, 1994

Mr. Barrett Parker  
U.S. Generating Company  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-1616

AUG 2, 1994

Bureau of  
Air Regulation

Re: Cedar Bay Cogeneration Project, PA 88-24

Dear Mr. Parker:

The Department of Environmental Protection has reviewed the June 7, 1994, letter from Kevin Grant to Richard Robinson of the Jacksonville RESD concerning an alternative to reporting the percent reduction of SO<sub>2</sub>. The DEP Bureau of Air Regulation agrees with the RESD that the requirement to report the 30-day rolling average percent reduction in 40 CFR 60.49a is clearly applicable to Cedar Bay Generating Company.

Subsection 60.43a(a)(2) says that the owner of an affected facility shall not discharge gases which contain sulfur dioxide in excess of: "30 percent of the potential combustion concentration (70 percent reduction) when emissions are less than 260 ng/J (0.6 lb./million Btu) heat input." The fact that the requirements of the federal NSPS applies to the Cedar Bay facility is obvious from the keywords "when emissions are less than . . ."

40 CFR 60.45a [Commercial Demonstration Permits] provides evidence that the EPA intended for the reduction requirements to be applicable to circulating fluidized bed boilers. Subsection 60.45a(c) requires circulating fluidized bed units permitted as commercial demonstration units to achieve emissions of less than 1.2 lb./MMBtu and an 85% reduction in potential combustion concentrations. Under the commercial demonstration provisions, affected units must achieve at least 85% reduction regardless of the lb./MMBtu achieved.

The provisions of 40 CFR 60.47a(b)(3) allow the owner to use an "as fired" fuel monitoring system to determine sulfur dioxide concentrations prior to control. 40 CFR 60.46a(e) states, "After the initial performance test . . . compliance with the sulfur dioxide emission limitations and percentage reduction requirements . . . is based on the average emission rate for 30 boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for sulfur dioxide . . . and a new percent

Page 2

reduction for sulfur dioxide are calculated to show compliance with the standards." Based on 40 CFR 60.46a, the sulfur content of the fuel is to be determined on a daily basis when an "as fired" fuel monitoring system is used. 40 CFR 60.46a(g) states, ". . . Compliance with the percentage reduction requirement for SO<sub>2</sub> is determined based on the average inlet and average outlet rates for the 30 successive boiler operating days."

Pursuant to 40 CFR 60.49a(b)(3), each quarterly report is required to include the percent reduction of potential sulfur concentrations.

The company's failure to provide the required information is a reportable violation of the federal NSPS. I recommend that the matter be handled through an enforcement action.

The proposal to alter the fuel sampling schedule requires both federal and state approval. It would probably require a variance at the state level pursuant to Chapter 403, F.S. The proposal to switch from the analysis of a daily fuel sample to the analysis of a weekly composite fuel sample may be inappropriate. Analysis of a weekly composite may artificially damp or flatten variations indicative of noncompliance. Considering the variability of the sulfur content in solids, it may not be appropriate to grant the request.

Please relay these comments to Mr. Grant and Mr. Stallwood as appropriate.

Sincerely,

*Hamilton S. Owen*

Hamilton S. Owen, P.E.  
Administrator, Siting  
Coordination Office

cc: Ernie Frey, DEP/NED  
Robert S. Pace, P.E., RESD  
Bruce Mitchell, DEP/BAR

**Cedar Bay Generating Company,  
Limited Partnership**

RECEIVED

RETURN RECEIPT P 011 994 774

JUN 23 1994

June 20, 1994

Bureau of  
Air Regulation

File No.: 6.3.1.2

Ms. Patty Adams  
Mail Stop 5505  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Submission of Affidavit of Publication

Dear Ms. Adams:

The Cedar Bay Generating Company, Limited Partnership ("CBGC") is pleased to submit to your office the enclosed affidavit of publication which provided public notice for amending CBGC's Permit Number PSD-FL-137A. As mentioned in the affidavit, this notice was published in the **Florida Times-Union** on March 24, 1994. CBGC trusts that your office will rapidly generate and transmit the amended permit, since, to CBGC's knowledge, no comments concerning this notice were received by your office, the Northeast Division, or the City of Jacksonville's Air Quality Division.

Should you have questions concerning submission of this notice, please contact me at 301-718-6937.

Sincerely,



Barrett Parker  
Environmental Specialist

BP/mm

Enclosure

cc: J.G. Kelly  
J.F. Stallwood  
K. Grant

B. Mitchell

G. Harper, EPA

J. Danyah, NPS

C. Kirts, NE Dist  
R. Robinson, REED



7500 Old Georgetown Road • Bethesda, Maryland 20814-6161 • 301-718-6800 • Fax 301-718-6900

An affiliate of U.S. Generating Company

Printed on 100% recycled paper

The Department of Environmental Protection gives notice of its amendment of a prevention of significant deterioration (PSD) permit to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, MD 20814. The Department previously issued a PSD permit for the operation of the Cedar Bay Cogeneration Project to be located in Jacksonville, Florida. The amended PSD permit will establish lower emission limits for the circulating fluidized bed boilers, require compliance for certain emissions to be demonstrated using continuous emissions monitors, authorize the use of short fiber rejects as a fuel, authorize the circulating fluidized bed boilers to operate at less than seventy percent capacity, reduce the sulfur content of fuel oil used and allow increased use of fuel oil during startup, decrease limestone dryer emissions, and reduce emission from the material handling and treatment area. Overall, the emissions and ambient air quality impacts will be reduced by the changes to the PSD permit.

A person whose substantial interests are affected by the Department's permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 within 14 days of publication of this notice. The Petitioner shall mail a copy of the petition to the applicant, Mr. Mark V. Carney, Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, MD 20814, at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative hearing under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department's permit file number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application, have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of the publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer pursuant to Rule 28-5.207, F.A.C.

The application for permit amendment and draft amended permit are available for public inspection during normal business hours, 8:00 AM to 5:00 PM, Monday through Friday, except legal holidays at

Department of Environmental Protection  
Division of Air Resource  
111 South Magnolia Avenue  
Magnolia Park Courtyard, Suite 4  
Tallahassee, FL 32301  
Preston Lewis  
(904) 488-1344

Department of Environmental Protection  
Northeast Division, Air Section  
7825 Baymeadows Way, Suite 200-B  
Jacksonville, FL 32256-7577  
Ernest E. Frey, Director

Department of Regulatory and Environmental Services  
Air Quality Division  
421 West Church Street, Suite 412  
Jacksonville, FL 32202-4111  
Steve Pace  
(904) 630-3666

Any person may send written comments on the proposed action to Mr. Preston Lewis at 2600 Blair Stone Road, Tallahassee, FL 32399, (904) 488-1344. All comments received within 30 days of publication of this notice will be considered in the Department's final determination. Further, a public hearing can be requested by any person. Such requests must be submitted within 30 days of this notice.

**FLORIDA PUBLISHING COMPANY**  
Publisher  
JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }  
COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

John Leist

\_\_\_\_\_ who on oath says that he is

Classified Sales Representative

\_\_\_\_\_ of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the

attached copy of advertisement, being a Legal Notice

in the matter of Notice of Amendment of PSD Permit

in the \_\_\_\_\_ Court,

was published in THE FLORIDA TIMES-UNION in the issues of \_\_\_\_\_

24 March 1994

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me  
this 24 \_\_\_\_\_ day of

March, A.D. 1994.

*Notary Public*  
Notary Public,  
State of Florida at Large.  
*JANIE LIKENS*  
My Commission Expires \_\_\_\_\_

*John Leist*



Florida Department of  
Environmental Protection

Memorandum

TO: Buck Oven  
FROM: Bruce Mitchell *BM*  
DATE: April 13, 1994  
SUBJ: Cedar Bay Generating Company's Request to Install a Propane Heater System to the Pelletizing Silo as a Trial Teat to Drive Off Moisture that Is Causing Agglomeration and System Operation Problems

*PL*  
*INFO*  
*Patty file*

I have discussed this request with John Brown (BAR), Mort Benjamin (NED) and Richard Robinson (RESD), and we deem the request to be acceptable and require no further emissions review for approval. However, if the trial system does provide a solution to the existing problem(s), then a final proposal needs to be submitted for Department review prior to permanent installation(s).

Please give me a call if there are any questions. Thanks.

921-9506/488-1344


cc: C. Fancy  
J. Brown  
M. Benjamin, NED  
R. Robinson, RESD



Florida Department of  
**Environmental Protection**

Memorandum

---

TO: Buck Oven  
FROM: Bruce Mitchell   
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Please give me a call if there are any questions. Thanks.

921-9506/488-1344

cc: C. Fancy  
J. Brown  
M. Benjamin, NED  
R. Robinson, RESD

BEST AVAILABLE COPY

**Cedar Bay Generating Company,  
Limited Partnership**

RECEIVED

April 7, 1994

APR 11 1994

Mr. Hamilton S. Oven, P.E.  
Administrator  
Siting Coordination Office  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Bureau of  
Air Regulation

File #: 66.37.1

RE: Notification of Temporary Operation of an Air Heater and a Conveyor

Dear Mr. Oven:

During an ash pelletization update meeting on March 29, 1994 with Mr. Dwyane Twiggs and Mr. Sam Barket of the City of Jacksonville's Regulatory and Environmental Services Department ("RESD"), representatives of the Cedar Bay Generating Company, L.P. ("CBGC") identified excess condensed moisture in the ash pelletizing curing silos as one of the remaining obstacles to as-designed operation of the ash pelletizing system and discussed two approaches to be used on a temporary basis to reduce or to reduce the effect of this excess moisture. One approach involves providing heated air in the top of the ash pelletizing silo and the other approach involves keeping the ash pellets in motion. The following paragraphs contains more information on these approaches. Mr. Twiggs suggested notifying your office of these approaches before initiating their use; these approaches have also been discussed with Mr. Richard Robinson of RESD and with Mr. Morton Benjamin of Florida's Department of Environmental Protection's Northeast District.

Air Heater

Pellet agglomeration is occurring in CBGC's silos. This agglomeration impedes pellet flow thus allowing moisture to condense above the static pellets. CBGC believes that the addition of heated air can entrain this excess moisture for removal in the impingement scrubber, and CBGC will conduct a four-week trial on one of the silos to determine the effectiveness of heated air addition. Specifically, propane from a rented one thousand gallon tank will be combusted in a portable heating unit to provide, on an hourly basis, approximately 1.1 million BTUs to 360,000 cubic feet of air. As shown on the first enclosed sketch, the tank will be located on the ground, while the heater will be located on top of silo 1A and connected via ductwork to an existing curb cap. Moisture laden exhaust air will continue to be routed through the ash pelletizing curing silo impingement scrubber for removal of dust and moisture with no decrease in scrubber performance. Should the trial prove successful, CBGC plans to continue operating the system until a permanent heating system is installed and operational.

April 7, 1994

Page 2

### Temporary Conveyor

Until all pelletizing system modifications are in place, CBGC can expect periods of pellet agglomeration to occur. This agglomeration restricts normal pellet flow in the silo which leads to further agglomeration. The short term solution for minimizing agglomeration is to keep good quality pellets in motion, while removing agglomerated material. CBGC can cycle the pellets from the pelletizer, through the silo, and to the temporary storage pile, but CBGC needs to use a temporary conveyor to transfer good quality pellets from the temporary storage pile to the existing silo loading conveyor. Before loading the temporary conveyor, CBGC will remove any agglomerated material. In order to minimize fugitive dust during pellet transfer, both the head and tail ends of the temporary conveyor will be covered. As shown on the second enclosed sketch, the tail end of the conveyor will be surrounded by a framework of scaffolding; three sides and the top of the scaffolding will be covered by heavy canvas or plastic and the fourth side will contain an opening sized to fit the bucket of a front end loader. The transition area near the head end of the temporary conveyor will also be enclosed with heavy canvas or plastic.

### Other Approaches

Other moisture-reducing techniques CBGC is performing include insulating the hoppers to reduce interior condensation and resealing the joint and penetrations of the silo tops to reduce leaking. As was mentioned in my March 7, 1994 letter to you, CBGC is also considering adding to the silos a pellet recycle system or other permanent changes which would reduce the chances for pellet agglomeration.

Upon receipt and assembly of all required equipment and supplies, CBGC will initiate use of the air heater and of the temporary conveyor. CBGC will keep your office informed of the effectiveness of these approaches in reducing pellet agglomeration. Should you or a member of your staff have questions concerning these approaches, please contact me at (301) 718-6937.

Sincerely,



Barrett Parker  
Environmental Specialist

Enclosures

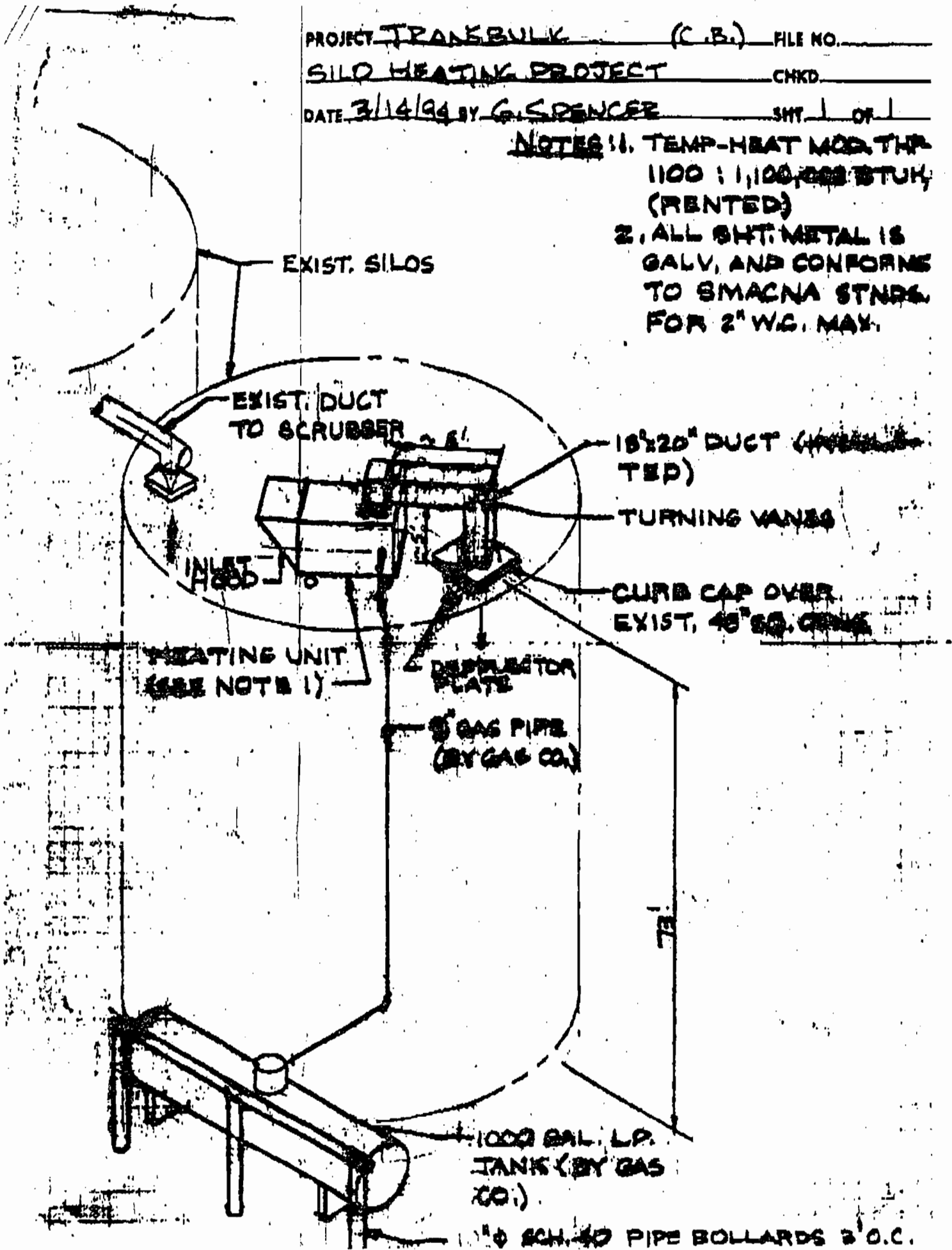
SENT BY: USGen  
4-8-94 10:21AM  
April 7, 1994

Page 3

cc: R.S. Pace, RESD  
C. Kirts, NED DEP  
J.F. Stallwood, CBGC  
C.M. Staley, USGC  
J. Roberson, USOSC  
J.G. Kelly, USGC  
M.A. Perry, B&V

PROJECT TRANKBULK (C.B.) FILE NO. \_\_\_\_\_  
SILD HEATING PROJECT CHKD. \_\_\_\_\_  
 DATE 3/14/94 BY G. SPENCEE SHY. 1 OF 1

NOTES: 1. TEMP-HEAT MOD. THP  
 1100 : 1,100,000 BTUH  
 (RENTED)  
 2. ALL SHY. METAL IS  
 GALV. AND CONFORMS  
 TO SMACNA STNDS.  
 FOR 2" W.C. MAX.



EXIST. SILOS

EXIST. DUCT TO SCRUBBER

15x20" DUCT (INSULATED)

TURNING VANES

INLET HOOD

CURB CAP OVER EXIST. 45° CONE

HEATING UNIT (SEE NOTE 1)

DEFLECTOR PLATE

3" GAS PIPE (BY GAS CO.)

1000 GAL. LP. TANK (BY GAS CO.)

1" SCH. 40 PIPE BOLLARDS 3' O.C.

BEST AVAILABLE COPY

AREA FOR DUST CONTROL

PELLETIZING BLD

CONVEYOR CVY-3

CURING SILO

RECHARGING CONVEYOR  
CVY-3A

PLAN VIEW

INSTALL SCAFFOLDING 2' CLEAR  
OF HOPPER AND ON 3 SIDES.

COVER 3 SIDES AND TOP WITH  
HEAVY CANVAS OR PLASTIC  
SHEETING FOR DUST CONTROL.

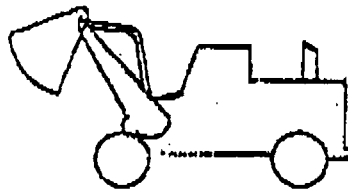
F.E.L. DUMP  
HOPPER

COVER ON WEST SIDE  
TO ALLOW ENTRY OF  
F.E.L. BUCKET ONLY

PROVIDE MIN  
OPEN AREA

DUMP HOPPER

SECTION "A"



**TRANSBULK** CLEVELAND, OHIO

CEDAR BAY COGEN FACILITY

ASH PELLETIZING SYSTEM

SKETCH NO DA-100

BEST AVAILABLE COPY

U.S. Generating Company

## Fax Message

DATE:

4/13/94

TO:

Mr. Bruce Mitchell

FACSIMILE NO.:

COMPANY:

FDEP

NO. OF PAGES:

6  
(including this one)

CITY/STATE:

Tallahassee, FL

FROM:

Barbara Palca

PHONE NO.:

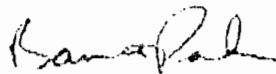
301/718-6937

SPECIAL INSTRUCTIONS:

Please deliver ASAP

If transmittal is incomplete or illegible, please call at 301-718-.

Messages: A copy of our notification follows. Please call me should you have questions



## CONFIDENTIALITY NOTICE

The information contained in this telefacsimile message is privileged and confidential, and intended only for the use of the individual(s) and/or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any unauthorized disclosure, copying, distribution or taking of any action in reliance on the contents of the telecopy materials is strictly prohibited and review by any individual other than the intended recipient shall not constitute waiver of the attorney/client privilege. If you have received this transmission in error, please immediately notify us by telephone (collect) to arrange for the return of the materials. Thank you

BEST AVAILABLE COPY

**Cedar Bay Generating Company,  
Limited Partnership**

April 7, 1994

**VIA FACSIMILE**

Mr. Hamilton S. Oven, P.E.  
Administrator  
Siting Coordination Office  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

File #: 66.37.1

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**Heated Air**

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**BEST AVAILABLE COPY**

April 7, 1994  
Page 2

Recycle Conveyor

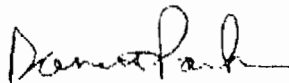
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Sincerely,



Barrett Parker  
Environmental Specialist

Enclosures

April 7, 1994  
Page 3

**BEST AVAILABLE COPY**

cc: R.S. Pace, RESD  
C. Kirts, NED DEP  
J.F. Stallwood, CBGC  
C.M. Staley, USGC  
J. Roberson, USOSC  
J.G. Kelly, USGC  
M.A. Perry, B&V

03-22-1994 17:01

9047511008

CEDAR BAY

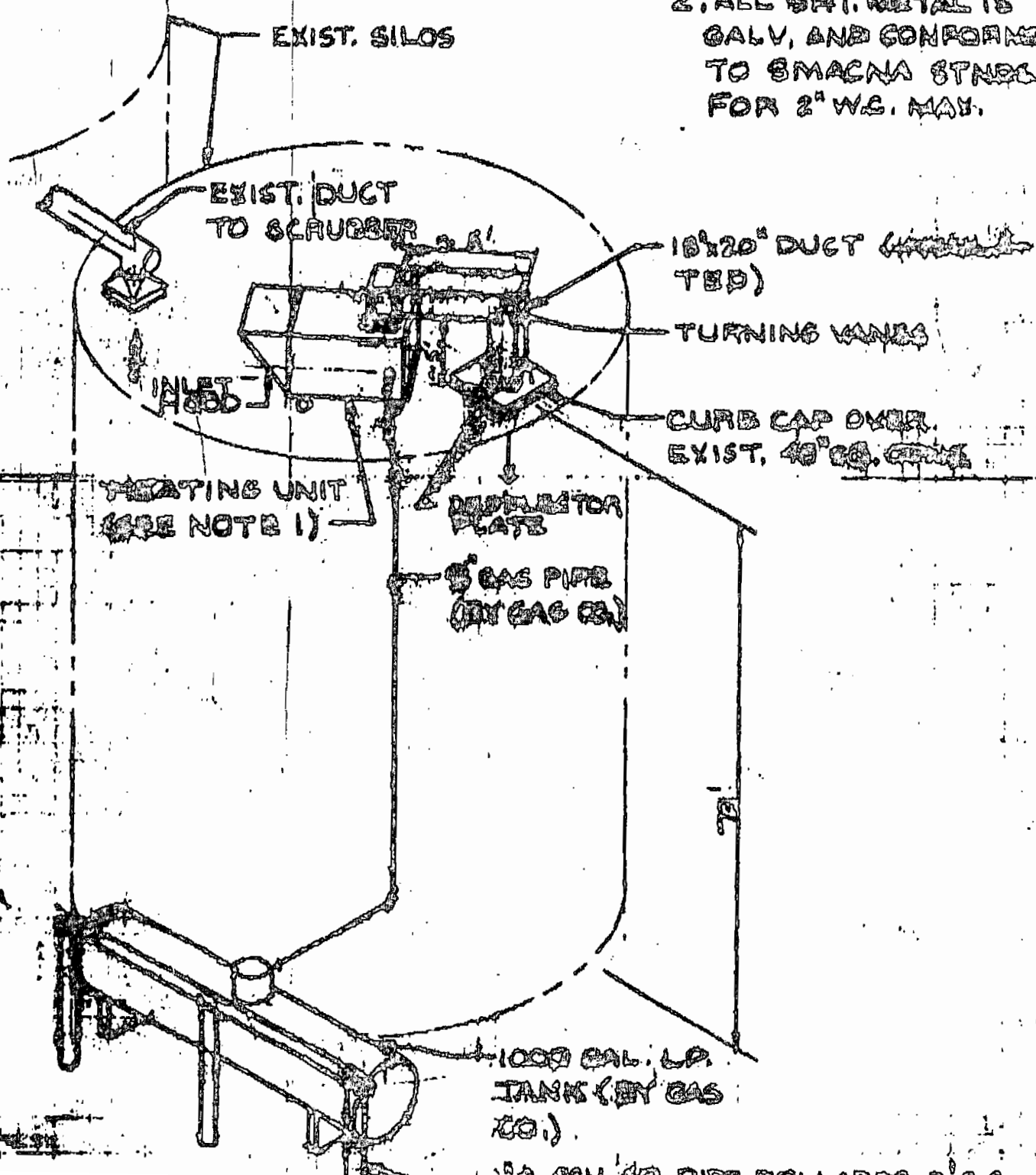
P.02

PROJECT FRANK BULK (C.B.) FILE NO. \_\_\_\_\_

SILO HEATING PROJECT CHNO \_\_\_\_\_

DATE 3/14/94 BY G. SPENCE SHY 1 OF 1

- NOTES:
1. TEMP-HEAT MOD. THRU 1100 : 1,100,000 BTUH (RENTED)
  2. ALL SHIT. METAL IS GALV. AND CONFORMS TO SMACNA STAND. FOR 2" WG. MAX.



EXIST. SILOS

EXIST. DUCT TO SCRUBBER

18x20" DUCT (GALV. TEB)

TURNING VANES

CURB CAP OVER EXIST. 40" CG. CONE

HEATING UNIT (SEE NOTE 1)

DEWATERATOR PLATE

5" GAS PIPE (BY GAS CO.)

1000 GAL. LP. TANK (BY GAS CO.)

50 GAL. 20" PIPE ROLLARS 3' O.C.

22-1994 18:52

9047511008

CEDAR BAY

P.02

CURING SILO

ENCLOSE TRANSITION AREA FOR DUST CONTROL

PELLETIZING BLD LINE

CONVEYOR CVY-3

CURING SILO

RECHARGING CONVEYOR CVY-3A



PLAN VIEW

INSTALL SCAFFOLDING 2' CLEAR OF HOPPER AND ON 3 SIDES.

COVER 3 SIDES AND TOP WITH HEAVY CANVAS OR PLASTIC SHEETING FOR DUST CONTROL.

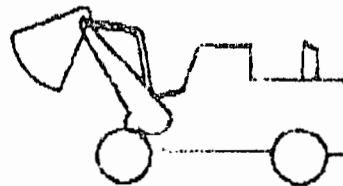
F.E.L DUMP HOPPER

COVER ON WEST SIDE TO ALLOW ENTRY OF F.E.L BUCKET ONLY

PROVIDE MIN OPEN AREA

DUMP HOPPER

SECTION "A"



**TRANSBULK** CLEVELAND, OHIO

CEDAR BAY COGEN FACILITY

ASH PELLETIZING SYSTEM

SKETCH NO DA-100

RECEIVED

MAR 28 1994

Bureau of  
Air Regulation

March 4, 1994

Hon. Virginia Wetherall  
Secretary  
Environmental Protection Department  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399-3000

Dear Secretary Wetherall:

Enclosed is U.S. Generating Company's news release announcing commercial operation of our Cedar Bay Generating Plant. On behalf of USGen, we would like to thank you for your support in making this project a success. We are grateful to have had the opportunity to turn the project around and achieve everyone's goal, a net environmental benefit for the Jacksonville community. Of major importance is that the plant was completed on time and within budget and is now supplying FP&L and its customers with a clean, reliable source of electricity.

If you are interested in receiving a tour of the plant, we would be happy to arrange this at your convenience.

Sincerely,

Kent L. Fickett  
Vice President, Environmental  
& Regulatory Affairs

John K. Hawks  
Director,  
Corporate Communications &  
Public Affairs

J. Franklin Stallwood  
General Manager,  
Cedar Bay Generating Plant

KLF:cmb

Encl.

*Bruce  
forwarding  
i file*

~~Howard Rhodes~~

*→ Dan*

U.S. Generating Company FYI

*Clair*

RECEIVED

MAR 25 1994

Division of Air  
Resources Management

*Howard  
3/28*



# NEWS

FOR IMMEDIATE RELEASE

**U.S. Generating Company**  
*Corporate Communications &  
Public Affairs Department*  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-6161  
301-718-6803  
Fax 301-718-6908

Contact: **Jack Hawks**  
301-718-6805

## ***USGen Announces Commercial Operation of Cedar Bay Plant***

Bethesda, Md., February 14, 1994 -- U.S. Generating Co. (USGen) announced today that the Cedar Bay Generating Plant, a \$535 million, coal-fueled cogeneration facility in Jacksonville, Fla., has entered commercial operation. The 250-megawatt, circulating fluidized bed (CFB) plant is now selling its full electric output to Florida Power & Light Co. (FPL) under a 31-year power purchase agreement.

The plant was constructed by Multipower Associates (a consortium of Pyropower Corp., National Power Development, Inc., and The Pritchard Corp.), and led by Black & Veatch as construction manager, under a 33-month turnkey contract. The plant began operating ahead of schedule, despite substantial revisions to the plant's original site certification that resulted in a 1992 interruption to construction, and a change in management and ownership to USGen and its affiliate, Cedar Bay Generating Co., L.P.

"There have been few, if any, instances in my experience where a project of this magnitude has been able to bounce back from the uncertainty of changing ownership and possible loss of its certification, particularly in the middle of construction," said J. Franklin Stallwood, Cedar Bay's general manager.

In addition to its electricity sales to FPL, the plant will also sell a maximum of 380,000 pounds of process steam per hour to the adjacent Seminole-Kraft Corp. (SKC) recycling linerboard mill. The cogeneration process, in which two useful forms of energy -- electricity and process steam -- are produced from a single source of fuel, allows SKC to satisfy much of its steam requirements and thereby retire five existing boilers that had been the mill's original steam source.

Construction slowed in the summer of 1992 when the Florida Cabinet threatened to revoke the plant's certification as a result of questions regarding the project's environmental commitments. The senior debt holders, a group of 10 commercial banks and institutional lenders, subsequently decided to search for a new owner and manager.

-more-



-2-

USGen entered into a management agreement with the senior lenders in October 1992, and affiliates of USGen assumed ownership in March 1993. The plant's revised certification was reissued by the Florida Department of Environmental Protection in April 1993 and approved by the Cabinet in May 1993.

To augment the steam from the cogeneration plant, SKC is installing three new natural gas-fueled packaged boilers that will go on line later this month. According to USGen, the annual air emissions from the three CFB boilers in the cogeneration plant and the three new SKC boilers will be 13 percent less than the five original boilers at the paper mill.

Another major environmental improvement in the revised design of the cogeneration plant has been the installation of a zero-discharge water treatment system, which has resulted in an estimated 27 percent savings in water requirements and eliminated any process water discharge into the nearby St. Johns River. "USGen's original objective of operating a generating facility that results in a net benefit to the local environment has been realized," Stallwood said.

A USGen affiliate, U.S. Operating Services Co., is operating the facility under a long-term operations and maintenance agreement with Cedar Bay Generating. USGen will continue its involvement by providing management services during plant operation.

The Cedar Bay plant will use approximately 950,000 tons of coal per year in its CFB combustion process. Costain Coal, Inc., of Lexington, Ky., will supply the coal and dispose of the ash in an ash disposal facility adjacent to the mine sites. CSX Transportation, which is based in Jacksonville, is providing all of the associated rail transportation services between the plant and the mines in eastern Kentucky.

Bethesda, Md.-based U.S. Generating is engaged in the development and acquisition of electric power projects that sell electricity on a wholesale basis to utilities nationwide. USGen is the developer/manager of eight plants in construction and operation, and manages investments in three other operating facilities. Together, these plants total 1,708 megawatts and represent an investment of \$5 billion.

USGen is a partnership of PG&E Enterprises, the non-utility subsidiary of Pacific Gas and Electric Co., and Bechtel Enterprises, the development/financing unit of Bechtel Group, Inc.



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Virginia B. Wetherell  
Secretary

March 10, 1994

Mr. Barrett Parker  
U.S. Generating Company  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-1616

Re: Cedar Bay Cogeneration Project, PA 88-24

Dear Mr. Parker:

The Department of Environmental Protection has reviewed the request for extension of the alternative flyash disposal procedure for the Cedar Bay Cogeneration facility as outlined in your letter of March 7, 1994. The alternate flyash disposal procedure may be used for a period not to exceed 45 days from March 10, 1994, otherwise until April 24, 1994. Please have Mr. Stallwood or other plant person to inform the Jacksonville Regulatory and Environmental Services Division when flyash loading and shipment is to take place.

Sincerely,

*Hamilton S. Owen*  
Hamilton S. Owen, P.E.  
Administrator, Siting  
Coordination Office

cc: Ernie Frey, DEP/NED  
Alton W. Yates, RESD  
Clair Fancy, DEP/BAR



**FLORIDA PUBLISHING COMPANY**  
*Publisher*  
 JACKSONVILLE, DUVAL COUNTY, FLORIDA

**STATE OF FLORIDA  
 DEPARTMENT OF ENVIRONMENTAL  
 PROTECTION NOTICE OF INTENT  
 TO ISSUE PERMIT AMENDMENT**

PSD-FL-137(B)

STATE OF FLORIDA }  
 COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

Janice B. Kelly \_\_\_\_\_ who on oath says that he is

Legal Advertising Representative \_\_\_\_\_ of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the

attached copy of advertisement, being a \_\_\_\_\_ Legal Notice

in the matter of \_\_\_\_\_ Notice of intent to issue permit  
 Amendment \_\_\_\_\_

in the \_\_\_\_\_ Court,

was published in THE FLORIDA TIMES-UNION in the issues of \_\_\_\_\_

July 17, 1995

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me

this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_ Notary Public,  
 State of Florida at Large.

My Commission Expires \_\_\_\_\_

*[Handwritten Signature]*

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, Maryland 20814. This facility consists of three circulating fluidized bed coal-fired boilers, associated coal, ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and fugitive emissions associated with the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.) The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A state-

ment of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28.5.207, Florida Administrative Code.

The application/request is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection  
 Bureau of Air Regulation  
 111 S. Magnolia Drive, Suite 4  
 Tallahassee, Florida 32301

Department of Environmental Protection  
 Northeast District Suite 200B  
 7825 Baymeadows Way  
 Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

**Cedar Bay Generating Company,  
Limited Partnership**

**RECEIVED**

MAR 4 1994

Bureau of  
Air Regulation 66.7.2

March 3, 1994

Mr. Clair H. Fancy, P.E  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Publication of Notice of DEP's Intent To Issue PSD Permit PSD-FL-137A to  
CBGC

Dear Mr. Fancy:

Upon advice of our counsel, the Cedar Bay Generating Company, L.P. ("CBGC") plans to publish the enclosed notice in the legal advertisement section of the **Florida Times-Union**. CBGC believes that publication of such notice is preferred in order to assure the financial lenders that the potential risk of a future challenge to the prevention of significant deterioration ("PSD") permit is minimal. Please note that both the state and the federal notices are included in the enclosure. Proof of publication will be sent to Ms. Patty Adams at your office's address.

Should you or your staff have questions concerning the notice or publication of the notice, please contact me at (301) 718-6937.

Sincerely,



Barrett Parker  
Environmental Specialist

BP/mm

Enclosure

cc: J.F. Stallwood, CBGC                      C.M. Staley, CBGC  
J.G. Kelly, USGC                              M.V. Carney, USGC  
K.Z. Duckers, USGC



**Department of Environmental Protection**  
**Notice of Amendment of PSD Permit**  
**DEP No. PSD-LF-137A**

The Department of Environmental Protection gives notice of its amendment of a prevention of significant deterioration (PSD) permit to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, MD 20814. The Department previously issued a PSD permit for the operation of the Cedar Bay Cogeneration Project to be located in Jacksonville, Florida. The amended PSD permit will establish lower emission limits for the circulating fluidized bed boilers, require compliance for certain emissions to be demonstrated using continuous emissions monitors, authorize the use of short fiber rejects as a fuel, authorize the circulating fluidized bed boilers to operate at less than seventy percent capacity, reduce the sulfur content of fuel oil used and allow increased use of fuel oil during startup, decrease limestone dryer emissions, and reduce emission from the material handling and treatment area. Overall, the emissions and ambient air quality impacts will be reduced by the changes to the PSD permit.

A person whose substantial interests are affected by the Department's permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 within 14 days of publication of this notice. The Petitioner shall mail a copy of the petition to the applicant, Mr. Mark V. Carney, Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, MD 20814, at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative hearing under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department's permit file number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action.

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The application for permit amendment and draft amended permit are available for public inspection during normal business hours, 8:00 AM to 5:00 PM, Monday through Friday, except legal holidays at

Department of Environmental Protection  
Division of Air Resource  
Magnolia Park Courtyard, Suite 4  
Tallahassee, FL 32301  
Preston Lewis  
(904) 488-1344

Department of Environmental Protection  
Northeast Division, Air Section  
7825 Baymeadows Way, Suite 200-B  
Jacksonville, FL 32256-7577  
Ernest E. Frey, Director

Any person may send written comments on the proposed action to Mr. Preston Lewis at 2600 Blair Stone Road, Tallahassee, FL 32399, (904) 488-1344. All comments received within 30 days of publication of this notice will be considered in the Department's final determination. Further, a public hearing can be requested by any person. Such requests must be submitted within 30 days of this notice.



# Florida Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

## FAX TRANSMITTAL SHEET

TO: Barrett Parker

DATE: 3-16-94

PHONE: 301-718-6900

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 2

FROM: Bruce Mitchell

DIVISION OF AIR RESOURCES MANAGEMENT

COMMENTS: If you are going to go to PM, it is  
recommended that you include the following:

See attached pages

① 115-120  
② include BP out this.  
BR

PHONE: 904-488-1344

FAX NUMBER: 904/922-6979

If there are any problems with this fax transmittal, please call  
the above phone number.

**Department of Environmental Protection**  
**Notice of Amendment of PSD Permit**  
**DEP No. PSD-LF-137A**

C7 FL

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Preston Lewis  
(904) 488-1344

111 South Magnolia Ave

Department of Environmental Protection  
Northeast Division, Air Section  
7825 Baymeadows Way, Suite 200-B  
Jacksonville, FL 32256-7577  
Ernest E. Frey, Director

Department of Regulatory  
and Environmental Services  
Air Quality Division  
421 West Church Street, Suite 412  
Jacksonville, FL 32202-4111  
Steve Pace, 630-3666

Any person may send written comments on the proposed action to Mr. Preston Lewis at 2600 Blair Stone Road, Tallahassee, FL 32399, (904) 488-1344. All comments received within 30 days of publication of this notice will be considered in the Department's final determination. Further, a public hearing can be requested by any person. Such requests must be submitted within 30 days of this notice.

3/15 Bruce  
Thanks  
Clay

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 10-Mar-1994 12:15pm ES  
**From:** Bruce Mitchell TAL  
MITCHELL\_B  
**Dept:** Air Resources Manageme  
**Tel No:** 904/488-1344  
**SUNCOM:**

**TO:** Hamilton Buck Oven TAL ( OVEN\_H )  
**CC:** Clair Fancy TAL ( FANCY\_C )  
**Subject:** RE: Cedar Bay & TECO Big Bend

March 10, 1994

Buck,

I discussed the request with Clair Fancy and John Brown. Cedar Bay Cogeneration's request is acceptable and the Bureau has no objection to granting the extension of the expiration date for the alternative ash disposal system.

Bruce Mitchell  
488-1344

cc: John Brown



I N T E R O F F I C E M E M O R A N D U M

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Bruce Mitchell  
488-1344

cc: John Brown

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**Date:** 10-Mar-1994 12:22pm ES  
**From:** Bruce Mitchell TAL  
MITCHELL\_B  
**Dept:** Air Resources Manageme  
**Tel No:** 904/488-1344  
**SUNCOM:**

**TO:** John Brown TAL

( BROWN\_J )

**Subject:** Response to Buck Oven on Cedar Bay Cogen. Req. (Exp. Date Ext

I N T E R O F F I C E M E M O R A N D U M

**Date:** 09-Mar-1994 11:23am EST  
**From:** Hamilton Buck Oven TAL  
OVEN H  
**Dept:** Office of Secretary  
**Tel No:** 904/487-0472  
**SUNCOM:** Room 953-A

**TO:** Bruce Mitchell TAL  
**TO:** Clair Fancy TAL

( MITCHELL B )  
( FANCY\_C )

**Subject:** Cedar Bay & TECO Big Bend

Have you had a chance to review Cedar Bay's request to get a 45 day extension of the alternative ash disposal procedure? Richard Robinson from RESD called to say they had no objections to the extension and would send out an observer to verify opacity.

Please send me your response to Greg Nelson's objection to 5% opacity at Big Bend for the coal handling. The original conditions specified 20%. Do we have new regulations in effect that require compliance with 5%?

**Cedar Bay Generating Company  
Limited Partnership**

March 7, 1994

**VIA FACSIMILE**

Mr. Hamilton S. Oven, P.E.  
Administrator  
Siting Coordination Office  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**RECEIVED**

**MAR 8 1994**

Bureau of  
Air Regulation

File #: 66.37.1

RE: Extension of Alternative Ash Disposal Procedure for the Cedar Bay Cogeneration Project - Site Certification Number PA 88-24A

Dear Mr. Oven:

The Cedar Bay Generating Company, L. P. ("CBGC") requests a 45 day extension to the alternative ash disposal procedure's current expiration date of March 10, 1994. As you may recall, this procedure involves notifying the Jacksonville Regulatory and Environmental Services Division ("RESD") of ash loading commencement, loading ash into open rail cars, sealing the ash with water and a crusting agent, and sending the rail cars to a permitted ash disposal facility in West Virginia. Visible emissions testing conducted during initial ash loading and witnessed by a representative of RESD confirmed that ash removal according to the procedure is consistent with the low emissions ash removal techniques mentioned in the Conditions of Certification.

CBGC continues to correct malfunctioning components of the ash pelletizing system. Since our previous correspondence CBGC has modified the fly ash feed system's control parameters, modified the fly and bed ash systems' transport blowers, replaced the bed ash feed system's base plates, modified the bed ash feed system's rotors and hydrator discharge doors, replaced one of the pelletizing pan system's scraper plates, replaced the pellet handling system's variable speed distributor, aligned the pellet handling system's conveyor belts, modified the pellet loadout system's screens, redesigned the recycle system's pellet recycle conveyor recycle drag chutework, and replaced of the recycle system's recycle elevator buckets. Through this effort, CBGC has been able to produce and transport approximately 70 railcars of ash pellets.

Despite the success in correcting the components mentioned above, other malfunctioning components are not yet corrected. These components were identified during CBGC's complete system check, and their resolution should be achieved through addition of insulation around baghouses, replacement of pellet screens, addition of a clinker grinder, installation of silo liners,



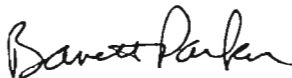
March 7, 1994

Page 2

and addition of a pellet recycle system. While these components are being corrected, unpelletized ash may be produced. Because the ash pelletizing system is designed to operate continuously on pre-determined ratios of bed and fly ash and since CBGC desires to maximize the operation of the ash pelletizing system, any unpelletized ash produced affects the overall material balance and needs to be removed promptly.

CBGC would like to meet in Tallahassee with you or members of your staff to further discuss both the corrections made and the corrections yet to be made on the ash pelletizing system. Should you desire, the meeting could be held on-site after a tour of the ash pelletizing system. I will contact your office regarding scheduling this meeting. In the interim, should you or your staff have questions concerning this extension request or the meeting, please contact me at (301) 718-6937.

Sincerely,



Barrett Parker  
Environmental Specialist

cc: J.F. Stallwood, CBGC  
C.M. Staley, USGC  
K. Fickett, USGC  
G. Weidinger, USGC  
J.G. Kelly, USGC  
Ernie Frey, DEP/NED  
Alton W. Yates, RESD  
Clair Fancy, DEP/BAR

**U.S. Generating Company**  
Cedar Bay Cogeneration Project

**RECEIVED**

**Fax Message**

DATE:	<u>3/7/94</u>	MAR 7 1994
TO:	<u>Mr. Clay Fancy</u>	FACSIMILE NO.: Bureau of Air Regulation
COMPANY:	<u>FL DEP/BAR</u>	NO. OF PAGES: <u>3</u> (including this one)
CITY/STATE:	<u>Tallahassee, FL</u>	
FROM:	<u>Barrett Parker</u>	PHONE NO.: <u>904-751-1007</u>
SPECIAL INSTRUCTIONS: <u>please deliver</u>		
If transmittal is incomplete or illegible, please call Vonda Sexton/Amy Nolan at <u>(904) 751-1007</u> .		

Message: Request to extend alternative ash disposal procedure attached;  
hard copy to follow.

**Cedar Bay Generating Company  
Limited Partnership**

March 7, 1994

**VIA FACSIMILE**

Mr. Hamilton S. Oven, P.E.  
Administrator  
Siting Coordination Office  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

File #: 66.37.1

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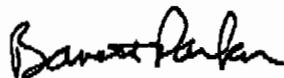


March 7, 1994  
Page 2

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Barrett Parker  
Environmental Specialist

cc: J.F. Stallwood, CBGC  
C.M. Staley, USGC  
K. Fickett, USGC  
G. Weidinger, USGC  
J.G. Kelly, USGC  
Ernie Frey, DEP/NED  
Alton W. Yates, RESD  
Clair Fancy, DEP/BAR



*Patty  
Gale*

cc Preston Lewis  
Bob Leech, N.E. U.

**Cedar Bay Generating Company  
Limited Partnership**

January 28, 1994

Mr. Hamilton S. Oven  
Florida Department of Environmental Protection  
Office of Siting Coordinator  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

File #: 61.1

Dear Mr. Oven:

The Cedar Bay Generating Company is pleased to submit the Quarterly Status Report enclosed with this letter. This report is required by Section II.C.2 of the Conditions of Certification, and this report contains a summary of progress from October to December 1993.

Should you have questions concerning this report, please call me at (301) 718-6937.

Sincerely,

*Barrett Parker*

Barrett Parker  
Environmental Specialist

Enclosure

cc: J.F. Stallwood  
J.G. Kelly

October - December 93  
Construction Status

1. Coal Unloading , Crushing and Storage

Coal handling system is in operation. Full long term stockpile is in storage on site and weekly off loading of coal trains is continuing. Bi-weekly deliveries of coal will begin in January 94. Construction of the on-site railroad and the coal storage area liner is complete. Conveying to the coal crusher and power plant silos commenced in November 93.

2. Limestone Pulverizing and Storage

Limestone handling system is in operation. Limestone storage area is at capacity. Conveying through the crushers and dryers is on-going and injection into the boilers commenced in November 93.

3. Ash Handling, Pelletizing and Storage

Ash handling system is in operation. Fly ash and bed ash have been loaded into the storage silos. Trial operation of the pelletizing system commenced in December 93. Full system operation is targeted for January 94.

4. Boilers

Bed material was placed in all three boilers and each fired on coal in November. Operation and checkout of the units continued at varying power levels through November and December. Construction of the thermal denox system is complete and the system is now in operation. Performance testing is targeted to commence in January 94.

5. Baghouses & Stack

Each of the fabric filter units (baghouses) have been seeded and were placed in operation in November. Fabric filter controls and fly ash removal system is in operation.

6. Turbine Generator

Turbine roll occurred on November 1 and initial synchronization on November 3. Final heat balance testing was completed in early December. Operation at varying power levels occurred in November and December.

7. Waste Water Treatment Facility

Construction is complete on the Waste Water Treatment Facility. The Evaporators have been placed into service and the crystallizer is forecast to go into operation in January 94. The pretreatment clarifiers continue to be operated to support the main power plant.

## 8. Fiber Waste Handling System

Construction of the fiber waste handling system is complete. Final mechanical and electrical checkout is underway. Operation of the system is targeted for the first quarter of 94.



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Virginia B. Wetherell  
Secretary

RECEIVED

January 21, 1994

JAN 25 1994

Mr. Barrett Parker  
U.S. Generating Company  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-1616

Bureau of  
Air Regulation

Re: Cedar Bay Cogeneration Project, PA 88-24

Dear Mr. Parker:

The Department of Environmental Protection has reviewed the request for extension of the alternative flyash disposal procedure for the Cedar Bay Cogeneration facility as outlined in your letter of January 19, 1994. The alternate flyash disposal procedure may be used for a period not to exceed 45 days from January 24, 1994, otherwise until March 10, 1994. Please have Mr. Stallwood or other plant person to inform the Jacksonville Regulatory and Environmental Services Division when flyash loading and shipment is to take place.

Sincerely,

*Hamilton S. Owen*  
Hamilton S. Owen, P.E.  
Administrator, Siting  
Coordination Office

cc: Ernie Frey, DEP/NED  
Alton W. Yates, RESD  
Clair Fancy, DEP/BAR

Cedar Bay Generating Company  
Limited Partnership

January 19, 1994

RECEIVED

VIA FACSIMILE

JAN 24 1994

Mr. Hamilton S. Oven  
Florida Department of Environmental Protection  
Office of Siting Coordinator  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Bureau of  
Air Regulation

File #: 66.37.1

**RE: Extension of Alternative Ash Disposal Procedure for the Cedar Bay  
Cogeneration Project - Site Certification Number PA 88-24A**

Dear Mr. Oven:

The Cedar Bay Cogeneration Project ("CBCP") requests a 45 day extension to the alternative ash disposal procedure's current expiration date of January 24, 1994. As you may recall, this procedure involves notifying the Jacksonville Regulatory and Environmental Services Division ("RESD") of ash loading commencement, loading ash into open rail cars, sealing the ash with water and a crusting agent, and sending the rail cars to a permitted ash disposal facility in West Virginia. Visible emissions testing conducted during initial ash loading and witnessed by a representative of RESD confirmed that ash removal according to the procedure is consistent with the low emissions ash removal techniques mentioned in the Conditions of Certification.

The procedure was developed in response to a startup malfunction of the pelletizing pans, one component of the ash pelletizing system. Adjustments made to the pelletizing pans by Transbulk, the ash pelletizer manufacturer, appear to have corrected the malfunction; however, an entire system check has not yet been completed. This check is underway and should be completed by the end of February. CBCP will not accept the system until each component (and the entire system) operates as guaranteed. In the interim period, continuous emissions monitor performance tests are underway and air emissions tests are scheduled to begin next week. In order to conduct these tests, the boilers must be operating and producing ash. So that the testing schedule not be impacted, CBCP needs to be able to remove all ash created during testing, irrespective of unchecked ash pelletizer system component malfunctions.



Mr. Hamilton S. Owen  
January 19, 1994  
Page 2

Should you or your staff have questions concerning this request, please contact me at  
(904) 751-1007.

Sincerely,

A handwritten signature in black ink, appearing to read "Barrett Parker", with a long horizontal flourish extending to the right.

Barrett Parker  
Environmental Specialist

cc: J.F. Stallwood, CBGC  
C.M. Staley, USGC  
J.G. Kelly, USGC  
E. Frey, FDEP  
A. Yates, RESD  
C. Fancy, FDEP

*Bruce*

Cedar Bay Generating Company  
Limited Partnership

RECEIVED

January 11, 1993

JAN 18 1994

Bureau of  
Air Regulation

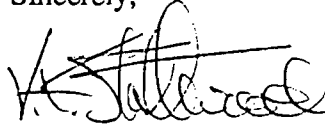
*Via Federal Express*

Mr. Hamilton Oven, Administrator  
Site Coordination Office  
Florida Department of Environmental Protection  
Marjory Stoneman Douglas Building  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399-3000

Dear Mr. Oven:

Enclosed for your review, is a copy of the Cedar Bay Cogeneration Plant "Integrated (SNCR) Unit Operation Manual" prepared by our Contractor, Black & Veatch. This manual contains additional information which should enable you to evaluate the system more extensively. However, should you need further information, please do not hesitate to call me directly at (904) 751-1007.

Sincerely,



J. Franklin Stallwood  
Project Manager

JFS/vs

Enclosure

cc: Barrett Parker, USGen w/o enclosure  
✓Clare Fancy, FDEP w/o enclosure



File Copy



# Florida Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

December 21, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Cogeneration Company, Inc.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-6161

Dear Mr. Fickett:

Re: Proposed 30-Day Testing Protocol Using Seminole Kraft Corporation's Recycle Rejects

The Department's Bureau of Air Regulation and Jacksonville's Regulatory and Environmental Services Division (RESA) have reviewed Mr. Barrett Parker's letter and enclosures received November 9, 1993, by the Department's Siting Section, which proposed a testing protocol for firing recycle fiber rejects from the Seminole Kraft Corporation facility in one of the two designated fluidized-bed coal fired boilers (CFB). Based on the review, the following comments are provided:

- o In the proposal, Section 2.0, SOURCE DESCRIPTION, the next-to-the-last paragraph has the statement that the "CBCF's permit allows using up to 426 cubic yards of short fiber recycle rejects per day, on a wet basis, as fuel." Permit Specific Condition No. II.A.1.b. states that "The maximum charging rate to each of two CFBs from the Seminole Kraft Corporation recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet .....". This appears to be a transcribing error. Please note and correct the 426 to 420.
- o In the proposal, Section 3.0, EMISSION LIMIT TEST PLAN, the last paragraph states that the test rate will represent "50%" of the rate necessary to achieve the maximum daily charging rate of 210 wet cubic yards. Permit Specific Condition No. II.A.8.d. states that "The compliance test shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel." Therefore, the proposal is not acceptable and the tests shall be conducted as stipulated in the condition. Please note and revise.

Also, in the same referenced text, the proposal indicates that only one CFB would be tested with the recycled fiber



Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

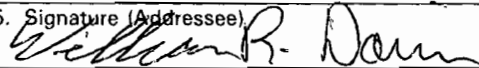
Consult postmaster for fee.

3. Article Addressed to:  
 Mr. Kent L. Fickett  
 Cedar Bay Cogeneration Company  
 7500 Old Georgetown Road  
 Bethesda, MD 20814-6161

4a. Article Number  
 P 872 562 590

4b. Service Type  
 Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)  


8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.

PS Form 3811, December 1991

★U.S. GPO: 1982-323-402

**DOMESTIC RETURN RECEIPT**

P 872 562 590



**Receipt for Certified Mail**

No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

Sent to  
 Mr. Kent L. Fickett, Cedar  
 Street and No Bay Cogeneration CO.  
 7500 Old Georgetown Road  
 P.O., State and ZIP Code  
 Bethesda, MD 20814-6161

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

Postmark or Date  
 Mailed: 12-29-93  
 Cedar Bay Cogeneration  
 PSD-FL-137A

PS Form 3800, JUNE 1991

Mr. Kent L. Fickett  
Letter: Recycle Fiber Rejects Test Proposal  
December 21, 1993  
Page 2

rejects. This assumes that the one test would suffice for the two designated CFBs that will receive and fire the rejects. There is no provision in the regulations that allows the Department to do this. Therefore, each emissions unit must be tested for compliance, as stipulated in the referenced condition. Please note and revise.

- o The RESD has requested that the continuous emissions monitoring data generated during the compliance tests be submitted along with the test analysis and results.

If there are any questions, please call Mr. Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,



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

CHF/BM/rbm

Attachment

cc: E. Frey, NED  
S. Pace, RESD  
B. Oven, DEP  
R. Donelan, Esq., DEP  
J. Harper, EPA  
J. Bunyak, NPS  
B. Leetch, NED

Ready File  
B. Oven

} 12/29/93 EC

Attachments

Florida Department of  
**Environmental Protection**

Memorandum

**TO:** Clair Fancy  
Division of Air Resources Management

**FROM:** Buck Oven *9/13/93*  
Siting Coordination Office

**DATE:** November 10, 1993

**SUBJECT:** Cedar Bay

RECEIVED

NOV 12 1993

Division of Air  
Resources Management

Please have the appropriate staff review and comment on the attached proposal for a waste fiber test burn.

You may respond directly to Cedar Bay with a copy to me.

Should you have any question, please give me a call.

HO/ss

Attachment

cc: Bob Leetch, NED  
Richard Donelan

BEST AVAILABLE COPY  
**Cedar Bay Generating Company,  
Limited Partnership**

November 8, 1993

Mr. Hamilton Oven  
Florida Department of Environmental Protection  
Office of Siting Coordinator  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

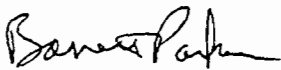
RECEIVED  
NOV 09 1993  
D.E.P.  
SITING COORDINATION

Dear Mr. Oven:

Enclosed please find a copy of the Plan for a 30-day test burn of Seminole Kraft's waste fiber recycle rejects at the Cedar Bay Generating Company (CBGC). This plan is submitted to fulfill the requirement given in Section II.A.1.h of the Conditions of Certification. This plan will be submitted to air emissions testing firms as part of a request for proposals to develop a specific protocol and perform appropriate testing.

Please contact me at (301) 718-6937 with any questions that you or your staff may have regarding this submittal.

Sincerely,



Barrett Parker  
Environmental Specialist

Enclosure

cc: F. Stallwood  
J. Kelly



**CEDAR BAY COGENERATION PROJECT, L.P.  
30-DAY TEST PLAN FOR SEMINOLE KRAFT'S  
SHORT FIBER RECYCLE REJECTS  
NOVEMBER 1993**

**1.0 INTRODUCTION**

Condition II.A.1.h of the Florida Department of Environmental Protection (DEP) Conditions of Certification for the Cedar Bay Cogeneration Project (CBCP) requires CBCP to submit a plan to the DEP for conducting a 30-day test burn to assert whether the circulating fluidized bed coal-fired boilers (CFBs) can burn short fiber recycle rejects (rejects) generated by the Seminole Kraft Corporation (SK) without exceeding any of the following limitations:

- Emissions limitations contained in Condition II.A of the Conditions of Certification for CBCP.
- Fuel usage limitations contained in Condition II.A of the Conditions of Certification for CBCP.

In addition, the 30-day test should demonstrate that the fiber rejects can be burned without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements.

CBCP will coordinate the test activities and will contract with a qualified firm to conduct emission measurements. The contact person for test activities is:

Emissions Test Plan - Barrett Parker, US Generating Company  
Telephone: 301-718-6937

**2.0 SOURCE DESCRIPTION**

Cedar Bay Cogeneration Facility

The Cedar Bay Cogeneration Facility (CBCF) is a coal and short fiber recycle reject fueled cogeneration facility located northeast of Jacksonville, Florida on thirty five acres of a four hundred twenty five acre site owned by SK. The CBCF is designed to provide up to 380,000 pounds per hour of process steam to the adjacent SK paper mill and up to 250 MW of electricity which will be sent to the Florida Power and Light Company.

Eastern Kentucky coal supplies over ninety nine percent of the fuel for the plant's three circulating fluidized bed steam generators; short fiber recycle rejects, which are a byproduct of recycled cardboard, account for less than one percent of the fuel. Very low sulfur number 2 fuel oil will be used as fuel for startup and flame stabilization at low load levels. Coal will be delivered via railcar, short fiber recycle rejects will be delivered from SK via conveyor, and fuel oil will be delivered by truck.

Limestone will be delivered by truck and injected with fuel in the steam generators' combustion chambers in order to aid in sulfur dioxide removal. Nitrogen oxides formation will be minimized through the use of a selective non-catalytic reduction process in which aqueous ammonia is added to flue gas. Fly and bottom ash consisting of coal ash, residual limestone, inert bed material, and sulfur dioxide reaction products will be collected in fabric filters, transferred to silos, pelletized, loaded in empty rail cars, and sent to a landfill near the mine site.

The plant contains a zero water discharge system in order to maximize the use of the lowest acceptable water quality for cooling. Specifically, the following sources of wastewater will be routed to the zero water discharge system for processing: SK treated wastewater; collected stormwater; cooling tower blowdown; coal, limestone, and ash storage area stormwater runoff; plant drains; and demineralizer regeneration. Boiler makeup water, plant service water, and potable water will come from existing SK water well systems. Sanitary wastewater will be pumped to SK's package treatment plant, and metals cleaning wastewater will be transported off site by a licensed waste hauler to a permitted treatment, storage, or disposal facility.

Sludges generated during the zero water discharge process will be collected on filters, pressed, and sent to a recycling facility, where possible, or to a licensed non-hazardous waste landfill. The facility is not expected to produce on a continuous, long term basis, any hazardous wastes. Should such wastes be generated during an intermittent, short duration process, the wastes will be transported to a licensed, permitted treatment, storage, or disposal facility.

### Seminole Kraft

Seminole Kraft Corporation is based in Jacksonville, Florida, and SK owns and operates a fully integrated pulp and paper mill. This mill is designed to produce up to 1700 tons per day of recycled paper and linerboard using only used corrugated containers as raw material. SK's mill is the world's largest corrugated paper recycler. Current average recycled paper and linerboard production is 1400 tons per day; current average used corrugated container consumption is also 1400 tons per day.

Short fiber recycle rejects, which can be used as fuel in two of the Cedar Bay Cogeneration Facility's three circulating fluidized bed steam generators, are derived during the recycling process. Bales of recycled cardboard are shredded, mixed with water, and reduced to a pulp. Heavy trash materials, such as staples, glass, metal, and

stones, sink to the bottom of the pulp slurry and are removed. The slurry is then spun in a centrifuge to remove any heavy materials that were not removed during the detrashing process. After leaving the centrifuge, the slurry passes through a coarse screen which removes many of the remaining contaminants such as wax or plastic. The slurry is centrifuged again, and short and long fibers are separated using two finer-meshed screens and a reverse cleaner. The short fiber recycle rejects are then pressed to remove liquids, stored in bins, and delivered to the CBCF via conveyor. CBCF's permit allows using up to 426 cubic yards of short fiber recycle rejects per day, on a wet basis, as fuel. This represents less than one percent of the total CBCF permitted fuel use. Current short fiber recycle reject production is about 200 cubic yards per day, on a wet basis.

Environmental benefits of SK's mill's conversion from virgin to recycled fiber include elimination of the mill's total reduced sulfur emissions and reduction of landfill requirements by as much as 4000 cubic yards per day. SK is owned by a group of investors and the Stone Container Corporation.

### 3.0 EMISSION LIMITS TEST PLAN

The 30-day test burn will include monitoring and testing of emissions to demonstrate that the CFBs can burn the rejects as fuel without exceeding limitations contained in Condition II.A of the Conditions of Certification.

#### Continuously-Monitored Pollutants

Compliance with the limitations for pollutants that are continuously monitored at the facility will be determined by the Continuous Emissions Monitoring System (CEMS). The continuously-monitored pollutants and their limitations are as follows:

<u>Pollutant</u>	<u>Emission Limitations (averaging times)</u>		<u>Tons per Year</u>
	<u>lbs./MMBtu</u>	<u>lbs./hr.</u>	
CO	0.175 (8-hr.)	186 (8-hr.)	758
NOx	0.17 (30-day)	180.7(30-day)	736.1
SO2	0.24 (3-hr.)	255.1 (3-hr.)	
SO2	0.20 (12-mo.)		866

Visible emissions (VE) shall not exceed 20 percent opacity (6-min. avg.), except for one 6-minute period per hour when VE shall not exceed 27 percent opacity.



## Other Pollutants

Additional emission limitations contained in the Conditions of Certification include the following:

<u>Pollutant</u>	<u>Emission Limitations</u>		<u>Tons per Year</u>
	<u>lbs./MMBtu</u>	<u>lbs./hr.</u>	
PM	.018	19.1	78
PM10	.018	19.1	78
H2SO4 mist	4.66e-04	0.50	2.0
Fluorides	7.44e-04	0.79	3.2
Lead	6.03e-05	0.06	0.26
Mercury	2.89e-05	0.03	0.13
Beryllium	8.7e-06	0.01	0.04
VOC	0.015	16.0	65

Ammonia slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

Based on analyses of the SK process and the rejects and because the rejects represent a small portion of the total fuel input to the boilers, significant changes in emissions of these pollutants is not expected unless the introduction of the rejects significantly effects the operation of the boilers or pollution control equipment. Significant changes in the operation of the boilers or pollution control equipment would be detected by the continuous emission monitors or by other facility monitoring systems (see section 4.0).

Emission levels of particulate matter (PM) will be determined during a two-day test to be conducted during the 30-day test burn. The PM test would provide information necessary to determine whether baghouse operations are impacted by the combustion of rejects.

The tests will be conducted by a qualified firm on one unit while the unit is burning rejects at a rate that represents at least 50 percent of the rate necessary to achieve the maximum daily charging rate of 210 wet cubic yards.

### **4.0 OPERATIONS FEASIBILITY TEST PLAN**

During the 30-day test burn, operations will be monitored to assert whether the CFBs can burn the rejects without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs. Factors to be evaluated include:

#### Material Handling and Transport

Facility personnel will monitor the performance of the reject handling systems to identify any operational problems that would interfere with the ability to properly

transport and feed all of the rejects from Seminole Kraft to the CFBs for combustion. Facility personnel will also monitor the performance of the baghouses and ash pelletizing systems.

### Boiler Operation

Facility personnel will monitor boiler performance during the 30-day test burn and record data necessary to determine the impact of reject combustion on boiler performance and operation. Performance during the critical times of initial introduction of the rejects into the boiler and initial removal of rejects from the fuel mix will be closely monitored.

## **5.0 FUEL USAGE LIMITATIONS**

Section II.A. of the Conditions of Certification contains the following limitations on fuel usage:

### Rejects

210 cu. yd./day wet

69,588 cu. yd./yr. wet

### Coal (per boiler)

104,000 lbs./hr.

39,000 tons /month

390,000 tons/year

### Fuel Oil

380 MMBtu/hr. per boiler

1,900,000 gals./yr. total

To be normally only used for start up.

Fuel use will be monitored during the 30-day test to determine whether all of the rejects can be burned without exceeding any of these fuel usage restrictions.

## **6.0 TEST BURN REPORT**

Within 30 days after the conclusion of the test burn, CBCP will report the results and analysis of the test burn to the DEP and the Regulatory and Environmental Services Department. This test burn report will include the results of the emissions testing and monitoring as well as an analysis of any significant operational problems noted during the 30-day test burn. Based on the testing and monitoring results and on the operations analysis, CBCP will conclude whether the test burn demonstrated that the rejects can be burned in compliance with the Condition of Certification and will identify any facility or operational changes necessary to achieve compliance.

## **7.0 TEST SCHEDULE**

The 30-day test burn will be conducted within one year of the initial facility compliance test. The test will conclude after 30 total days of operation while burning rejects for some or all of each of the 30 days in at least one of the boilers. The Florida Department of Environmental Protection will be notified by CBCP at least 30 days prior to the beginning of the test and at the completion of the test.

PERMITTEE:  
Cedar Bay Cogeneration, Inc.

Permit Number: PSD-FL-137A  
County: Duval

GENERAL CONDITIONS cont.:

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.

II. SPECIFIC CONDITIONS:

General: The construction and operation of Cedar Bay Cogeneration Project (CBCP) shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions as indicated, which reflect the conditions of the Modification of Certification dated May 11, 1993:

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the Seminole Kraft Corporation (SKC) recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

PERMITTEE:  
Cedar Bay Cogeneration, Inc.

Permit Number: PSD-FL-137A  
County: Duval

SPECIFIC CONDITIONS cont.:

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 minute average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR 60 and 61, Chapter 17-297, F.A.C., and listed in Specific Condition No. II.A.8. of this permit or by equivalent methods after obtaining prior written Department approval. In addition, compliance with the emission limitations in Specific Condition No. II.A.3. for CO, NOX and SO<sub>2</sub>, and with the opacity requirements in Specific Condition No. II.A.5., shall be determined with the continuous emission monitoring systems (CEMS) identified in Specific Condition No. II.A.9.

7. The CFBs are subject to 40 CFR 60, Subparts A and Da; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOX, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist, shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e) and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NOX, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel.

e. The following test methods and procedures pursuant to Chapter 17-297, F.A.C., and 40 CFR 60 and 61, or by equivalent methods after obtaining prior written Department approval, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Virginia B. Wetherell  
Secretary

December 15, 1993

Mr. Barrett Parker  
U.S. Generating Company  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-1616

Re: Cedar Bay Cogeneration Project  
PA 88-24

Dear Mr. Parker:

The Department of Environmental Protection has reviewed the SNCR maintenance manuals for the Cedar Bay Cogeneration facility as submitted by your letter of December 1, 1993. The Bureau of Air Regulation reviewed volumes 8 & 9 entitled "Pyropower Corporation Operation and Maintenance Manual for Pyroflow CFB Boilers for Cedar Bay Cogeneration Project". The Bureau has the following observations:

1. The O&M manual focused only on the ammonia stripper which converts an aqueous ammonia solution (29% ammonia) into "stripped ammonia solution" using steam. The stripped solution contains 10 ppm ammonia @247 degrees F. We have no adverse comments concerning the O & M manual (volumes 8 & 9 or the drawings) which were included.
2. To satisfy the permit specific condition requiring design specification for the SNCR system, other information should be submitted to the Bureau of Air Regulation on the remaining part of the system (metering, controls to maintain the NOx emission rates, etc.).

We appreciate your providing this information to the Department.

Sincerely,

*Hamilton S. Oven*  
Hamilton S. Oven, P.E.  
Administrator, Siting  
Coordination Office

HSO/hso

cc: Clair Fancy  
Preston Lewis

*Polly for file  
GRL  
12/15*

I N T E R O F F I C E M E M O R A N D U M

**Date:** 15-Dec-1993 07:05am EST  
**From:** Preston Lewis TAL  
LEWIS\_P  
**Dept:** Air Resources Management  
**Tel No:** 904/488-1344  
**SUNCOM:**

**TO:** Hamilton Buck Oven TAL ( OVEN\_H )  
**CC:** Bruce Mitchell TAL ( MITCHELL B )  
**CC:** John Brown TAL ( BROWN\_J )  
**CC:** Clair Fancy TAL ( FANCY\_C )

**Subject:** Cedar Bay SNCR System - Design Review

I have review<sup>ed</sup> volume 8 & 9 entitled "Pyropower Corporation Operation and Maintenance Manual for Pyroflow CFB Boilers for Cedar Bay Cogeneration Project". I have the following observations:

1. The O&M manual **focused only on the ammonia stripper** which converts an aqueous ammonia solution (29% ammonia) into "stripped ammonia solution" using steam. The stripped solution contains 10 ppm ammonia @247 degrees F. **I have no adverse comments concerning the O & M manual (volumes 8 & 9 or the drawings) which were included.**
2. To **satisfy the permit specific condition** requiring design specification for the SNCR system, **other information should be submitted to the Bureau of Air Regulation** on the remaining part of the system (metering, controls to maintain the NOx emission rates, etc.).

We appreciate your providing this information to the permittee.

BEST AVAILABLE COPY

**Cedar Bay Generating Company,  
Limited Partnership**

November 8, 1993

Mr. Hamilton Oven  
Florida Department of Environmental Protection  
Office of Siting Coordinator  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RECEIVED

NOV 09 1993

D. E. S.  
SITING COORDINATION

Dear Mr. Oven:

Enclosed please find a copy of the Plan for a 30-day test burn of Seminole Kraft's waste fiber recycle rejects at the Cedar Bay Generating Company (CBGC). This plan is submitted to fulfill the requirement given in Section II.A.1.h of the Conditions of Certification. This plan will be submitted to air emissions testing firms as part of a request for proposals to develop a specific protocol and perform appropriate testing.

Please contact me at (301) 718-6937 with any questions that you or your staff may have regarding this submittal.

Sincerely,



Barrett Parker  
Environmental Specialist

Enclosure

cc: F. Stallwood  
J. Kelly





Cedar Bay Generating Company  
Limited Partnership

December 1, 1993

*Via Federal Express*

C. H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RECEIVED

DEC - 8 1993

Division of Air  
Resources Management

**Re: Submission of the Cedar Bay Cogeneration Project's Design Specifications  
for the Nitrogen Oxides Selective Non-Catalytic Reduction System**

Dear Mr. Fancy:

Enclosed please find a copy of the design specifications for the nitrogen oxides selective non-catalytic reduction ("SNCR") system which will be used at the Cedar Bay Cogeneration Project. The general process description provided below was included in the third quarter report submitted to Mr. Hamilton Oven, and Mr. Oven requested that I send the design specifications to your office.

An aqueous ammonia solution that is approximately 29% ammonia and that is at ambient pressure will be delivered via truck to a storage tank. The ammonia solution will then be pumped to the stripping system. Before entering the top of the stripping column, the solution will be preheated to 140 degrees Fahrenheit in a heat exchanger. The solution will be fed through the packing of the column and will contact a stream of countercurrent steam, which will strip off ammonia. The pressure of the ammonia stripper will be controlled at 65 pounds per square inch gauge ("psig").

The ammonia vapor will then be stored in a vapor reservoir, which will be set at a pressure of 55 psig. This pressure also controls the feed rate of the aqueous ammonia to the stripper. When the pressure of the vapor reservoir reaches 55 psig, ammonia vapor will start flowing through the valve rack, the injection manifolds, and the injection nozzles into the boilers.

The stripped ammonia solution will contain only 10 parts per million of ammonia and will flow out the sump of the column and through a heat exchanger, where the solution will be cooled to a temperature around 247 degrees Fahrenheit. The control panel will indicate the column's differential pressure; the aqueous ammonia feed rate; the stripper and reservoir pressures; and the stripper overhead, stripper sump, and feed temperatures.



December 1, 1993

Page 2

Should you or your staff have questions concerning the design specifications, please contact me at (301) 718-6937.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Parker". The signature is written in a cursive style with a large, sweeping initial letter.

Barrett Parker  
Environmental Specialist

Enclosures (2 volumes)

cc (without enclosures): H. Oven, FDEP  
J.F. Stallwood, CBGC  
J.G. Kelly, USGC

copy Steve Pace - Bess D  
Chris Kirts - NC Dist  
for permit file

**Cedar Bay Generating Company,  
Limited Partnership**

**Certified Mail**

RECEIVED

DEC - 3 1993

Division of Air  
Resources Management

November 24, 1993

Mr. Winston A. Smith, Director  
Air, Pesticides and Toxics Management Division  
Region IV  
United States Environmental Protection Agency  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

File #: 66.7.2

Re: Initial Startup of the three circulating fluidized bed coal fired boilers

Dear Mr. Smith:

As required by 40 CFR 60.7(a)(3), we are pleased to notify your office of the initial startup of the circulating fluidized bed coal fired boilers at the Cedar Bay Cogeneration Project in Jacksonville, Florida on the following dates:

<u>Boiler</u>	<u>Initial Startup Date</u>
A	November 10, 1993
B	November 12, 1993
C	November 15, 1993

These boilers are subject to the requirements of 40 CFR Part 60, Subpart Da. Should you or your staff have questions, please contact me at (301) 718-6937.

Sincerely,

Barrett Parker  
Environmental Specialist

cc: **Clare Fancy, FDEP**  
Frank Stallwood, CBGC  
Janine Kelly, USGC  
Kevin Grant, USOSC



Memorandum

Florida Department of  
Environmental Protection

**TO:** Clair Fancy  
Division of Air Resources Management

**FROM:** Buck Oven *9/30*  
Siting Coordination Office

**DATE:** November 10, 1993

**SUBJECT:** Cedar Bay

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NOV 12 1993

Division of Air  
Resources Management

Please have the appropriate staff review and comment on the attached proposal for a waste fiber test burn.

You may respond directly to Cedar Bay with a copy to me.

Should you have any question, please give me a call.

HO/ss

Attachment

cc: Bob Leetch, NED  
Richard Donelan

**BEST AVAILABLE COPY Cedar Bay Generating Company,  
Limited Partnership**

November 8, 1993

Mr. Hamilton Oven  
Florida Department of Environmental Protection  
Office of Siting Coordinator  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RECEIVED  
NOV 09 1993  
D. F. E.  
SITING COORDINATION

Dear Mr. Oven:

Enclosed please find a copy of the Plan for a 30-day test burn of Seminole Kraft's waste fiber recycle rejects at the Cedar Bay Generating Company (CBGC). This plan is submitted to fulfill the requirement given in Section II.A.1.h of the Conditions of Certification. This plan will be submitted to air emissions testing firms as part of a request for proposals to develop a specific protocol and perform appropriate testing.

Please contact me at (301) 718-6937 with any questions that you or your staff may have regarding this submittal.

Sincerely,



Barrett Parker  
Environmental Specialist

Enclosure

cc: F. Stallwood  
J. Kelly



F V 8 1 2

**CEDAR BAY COGENERATION PROJECT, L.P.  
30-DAY TEST PLAN FOR SEMINOLE KRAFT'S  
SHORT FIBER RECYCLE REJECTS  
NOVEMBER 1993**

**1.0 INTRODUCTION**

Condition II.A.1.h of the Florida Department of Environmental Protection (DEP) Conditions of Certification for the Cedar Bay Cogeneration Project (CBCP) requires CBCP to submit a plan to the DEP for conducting a 30-day test burn to assert whether the circulating fluidized bed coal-fired boilers (CFBs) can burn short fiber recycle rejects (rejects) generated by the Seminole Kraft Corporation (SK) without exceeding any of the following limitations:

- Emissions limitations contained in Condition II.A of the Conditions of Certification for CBCP.
- Fuel usage limitations contained in Condition II.A of the Conditions of Certification for CBCP.

In addition, the 30-day test should demonstrate that the fiber rejects can be burned without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements.

CBCP will coordinate the test activities and will contract with a qualified firm to conduct emission measurements. The contact person for test activities is:

Emissions Test Plan - Barrett Parker, US Generating Company  
Telephone: 301-718-6937

**2.0 SOURCE DESCRIPTION**

Cedar Bay Cogeneration Facility

The Cedar Bay Cogeneration Facility (CBCF) is a coal and short fiber recycle reject fueled cogeneration facility located northeast of Jacksonville, Florida on thirty five acres of a four hundred twenty five acre site owned by SK. The CBCF is designed to provide up to 380,000 pounds per hour of process steam to the adjacent SK paper mill and up to 250 MW of electricity which will be sent to the Florida Power and Light Company.

Eastern Kentucky coal supplies over ninety nine percent of the fuel for the plant's three circulating fluidized bed steam generators; short fiber recycle rejects, which are a byproduct of recycled cardboard, account for less than one percent of the fuel. Very low sulfur number 2 fuel oil will be used as fuel for startup and flame stabilization at low load levels. Coal will be delivered via railcar, short fiber recycle rejects will be delivered from SK via conveyor, and fuel oil will be delivered by truck.

Limestone will be delivered by truck and injected with fuel in the steam generators' combustion chambers in order to aid in sulfur dioxide removal. Nitrogen oxides formation will be minimized through the use of a selective non-catalytic reduction process in which aqueous ammonia is added to flue gas. Fly and bottom ash consisting of coal ash, residual limestone, inert bed material, and sulfur dioxide reaction products will be collected in fabric filters, transferred to silos, pelletized, loaded in empty rail cars, and sent to a landfill near the mine site.

The plant contains a zero water discharge system in order to maximize the use of the lowest acceptable water quality for cooling. Specifically, the following sources of wastewater will be routed to the zero water discharge system for processing: SK treated wastewater; collected stormwater; cooling tower blowdown; coal, limestone, and ash storage area stormwater runoff; plant drains; and demineralizer regeneration. Boiler makeup water, plant service water, and potable water will come from existing SK water well systems. Sanitary wastewater will be pumped to SK's package treatment plant, and metals cleaning wastewater will be transported off site by a licensed waste hauler to a permitted treatment, storage, or disposal facility.

Sludges generated during the zero water discharge process will be collected on filters, pressed, and sent to a recycling facility, where possible, or to a licensed non-hazardous waste landfill. The facility is not expected to produce on a continuous, long term basis, any hazardous wastes. Should such wastes be generated during an intermittent, short duration process, the wastes will be transported to a licensed, permitted treatment, storage, or disposal facility.

### Seminole Kraft

Seminole Kraft Corporation is based in Jacksonville, Florida, and SK owns and operates a fully integrated pulp and paper mill. This mill is designed to produce up to 1700 tons per day of recycled paper and linerboard using only used corrugated containers as raw material. SK's mill is the world's largest corrugated paper recycler. Current average recycled paper and linerboard production is 1400 tons per day; current average used corrugated container consumption is also 1400 tons per day.

Short fiber recycle rejects, which can be used as fuel in two of the Cedar Bay Cogeneration Facility's three circulating fluidized bed steam generators, are derived during the recycling process. Bales of recycled cardboard are shredded, mixed with water, and reduced to a pulp. Heavy trash materials, such as staples, glass, metal, and

stones, sink to the bottom of the pulp slurry and are removed. The slurry is then spun in a centrifuge to remove any heavy materials that were not removed during the detrashing process. After leaving the centrifuge, the slurry passes through a coarse screen which removes many of the remaining contaminants such as wax or plastic. The slurry is centrifuged again, and short and long fibers are separated using two finer-meshed screens and a reverse cleaner. The short fiber recycle rejects are then pressed to remove liquids, stored in bins, and delivered to the CBCF via conveyor. CBCF's permit allows using up to 426 cubic yards of short fiber recycle rejects per day, on a wet basis, as fuel. This represents less than one percent of the total CBCF permitted fuel use. Current short fiber recycle reject production is about 200 cubic yards per day, on a wet basis.

Environmental benefits of SK's mill's conversion from virgin to recycled fiber include elimination of the mill's total reduced sulfur emissions and reduction of landfill requirements by as much as 4000 cubic yards per day. SK is owned by a group of investors and the Stone Container Corporation.

### 3.0 EMISSION LIMITS TEST PLAN

The 30-day test burn will include monitoring and testing of emissions to demonstrate that the CFBs can burn the rejects as fuel without exceeding limitations contained in Condition II.A of the Conditions of Certification.

#### Continuously-Monitored Pollutants

Compliance with the limitations for pollutants that are continuously monitored at the facility will be determined by the Continuous Emissions Monitoring System (CEMS). The continuously-monitored pollutants and their limitations are as follows:

<u>Pollutant</u>	<u>Emission Limitations (averaging times)</u>		<u>Tons per Year</u>
	<u>lbs./MMBtu</u>	<u>lbs./hr.</u>	
CO	0.175 (8-hr.)	186 (8-hr.)	758
NOx	0.17 (30-day)	180.7(30-day)	736.1
SO2	0.24 (3-hr.)	255.1 (3-hr.)	
SO2	0.20 (12-mo.)		866

Visible emissions (VE) shall not exceed 20 percent opacity (6-min. avg.), except for one 6-minute period per hour when VE shall not exceed 27 percent opacity.



## Other Pollutants

Additional emission limitations contained in the Conditions of Certification include the following:

<u>Pollutant</u>	<u>Emission Limitations</u>		<u>Tons per Year</u>
	<u>lbs./MMBtu</u>	<u>lbs./hr.</u>	
PM	.018	19.1	78
PM10	.018	19.1	78
H2SO4 mist	4.66e-04	0.50	2.0
Fluorides	7.44e-04	0.79	3.2
Lead	6.03e-05	0.06	0.26
Mercury	2.89e-05	0.03	0.13
Beryllium	8.7e-06	0.01	0.04
VOC	0.015	16.0	65

Ammonia slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

Based on analyses of the SK process and the rejects and because the rejects represent a small portion of the total fuel input to the boilers, significant changes in emissions of these pollutants is not expected unless the introduction of the rejects significantly effects the operation of the boilers or pollution control equipment. Significant changes in the operation of the boilers or pollution control equipment would be detected by the continuous emission monitors or by other facility monitoring systems (see section 4.0).

Emission levels of particulate matter (PM) will be determined during a two-day test to be conducted during the 30-day test burn. The PM test would provide information necessary to determine whether baghouse operations are impacted by the combustion of rejects.

The tests will be conducted by a qualified firm on one unit while the unit is burning rejects at a rate that represents at least 50 percent of the rate necessary to achieve the maximum daily charging rate of 210 wet cubic yards.

### **4.0 OPERATIONS FEASIBILITY TEST PLAN**

During the 30-day test burn, operations will be monitored to assert whether the CFBs can burn the rejects without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs. Factors to be evaluated include:

#### Material Handling and Transport

Facility personnel will monitor the performance of the reject handling systems to identify any operational problems that would interfere with the ability to properly

transport and feed all of the rejects from Seminole Kraft to the CFBs for combustion. Facility personnel will also monitor the performance of the baghouses and ash pelletizing systems.

### Boiler Operation

Facility personnel will monitor boiler performance during the 30-day test burn and record data necessary to determine the impact of reject combustion on boiler performance and operation. Performance during the critical times of initial introduction of the rejects into the boiler and initial removal of rejects from the fuel mix will be closely monitored.

## **5.0 FUEL USAGE LIMITATIONS**

Section II.A. of the Conditions of Certification contains the following limitations on fuel usage:

### Rejects

210 cu. yd./day wet  
69,588 cu. yd./yr. wet

### Coal (per boiler)

104,000 lbs./hr.  
39,000 tons /month  
390,000 tons/year

### Fuel Oil

380 MMbtu/hr. per boiler  
1,900,000 gals./yr. total  
To be normally only used for start up.

Fuel use will be monitored during the 30-day test to determine whether all of the rejects can be burned without exceeding any of these fuel usage restrictions.

## **6.0 TEST BURN REPORT**

Within 30 days after the conclusion of the test burn, CBCP will report the results and analysis of the test burn to the DEP and the Regulatory and Environmental Services Department. This test burn report will include the results of the emissions testing and monitoring as well as an analysis of any significant operational problems noted during the 30-day test burn. Based on the testing and monitoring results and on the operations analysis, CBCP will conclude whether the test burn demonstrated that the rejects can be burned in compliance with the Condition of Certification and will identify any facility or operational changes necessary to achieve compliance.

## **7.0 TEST SCHEDULE**

The 30-day test burn will be conducted within one year of the initial facility compliance test. The test will conclude after 30 total days of operation while burning rejects for some or all of each of the 30 days in at least one of the boilers. The Florida Department of Environmental Protection will be notified by CBCP at least 30 days prior to the beginning of the test and at the completion of the test.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

NOV 03 1993

4APT-AEB

Mr. Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Amendment/Revision of Permit PSD-FL-137 (Cedar Bay)

Dear Mr. Fancy:

As requested in your letter dated September 24, 1993, we have reviewed the revised draft Prevention of Significant Deterioration (PSD) permit and technical evaluation for the above referenced source. The revised permit incorporates the modifications to the originally permitted project which are the result of proceedings under the State's Power Plant Siting Act. These revisions include the requirement for the addition of add-on NO<sub>x</sub> controls, lowering the allowable sulfur content of fuels, utilizing continuous emissions monitors (CEMs) for compliance, and several operational changes which will result in reductions in most emission limits from those determined to be BACT in the original permit. We concur with your technical review and proposed permit conditions.

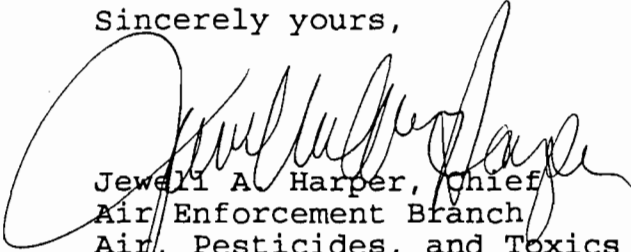
Your letter requested that EPA review and approve the revised permit in accordance with the partial delegation of authority for implementation of the PSD program for power plants located in Florida. Under the partial delegation agreement, your agency conducts the technical and administrative portions of the program while final permit issuance authority is retained by EPA until such time as necessary amendments to State statutes are made and full delegation is granted. By letter dated September 27, 1993, FDEP submitted amendments to the PPSA and requested full delegation of the PSD program for power plants located in Florida. By letter dated October 26, 1993, EPA granted full delegation of the PSD program to the State, including final permit issuance authority. Thus, it is appropriate that FDEP issue the revised final permit for Cedar Bay Cogeneration, Inc. (PSD-FL-137A).

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Division of Air  
Resources Management

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Division of Air  
Resources Management

Thank you for the opportunity to review and comment on this package. If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-5014.

Sincerely yours,



Jewell A. Harper, Chief  
Air Enforcement Branch  
Air, Pesticides, and Toxics  
Management Division

cc: ms.mitchell



ORIGINAL: CLAIR

YC: LARRY

From: Howard, J.G.

*Frank Howard*  
*Ken Platte*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

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D. E. R.  
SITING COORDINATION

OCT 23 1993

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DEPARTMENT OF  
Resources Management

CERTIFIED MAIL  
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NOV 09 1993

ENVIRONMENTAL PROTECTION

Division of Air  
Resources Management

NOV 02 1993

Virginia B. Wetherell  
Secretary  
Florida Department of Environmental  
Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

OFFICE OF THE SECRETARY

RE: Notice of Full Delegation of PSD Permitting Authority  
for Power Plants

Dear Ms. Wetherell:

This is in response to your letter of September 27, 1993, requesting that the Environmental Protection Agency (EPA) grant full delegation of permitting authority for sources subject to both the federal Prevention of Significant Deterioration (PSD) regulations and the Florida Electrical Power Plant Siting Act (PPSA), §403.501 et seq., Florida Statutes (1991).

We have reviewed the pertinent laws of the State of Florida and the rules and regulations thereof, and have determined that they provide an adequate and effective procedure for full implementation of the PSD program by the State of Florida.

In 1985, EPA and the Florida Department of Environmental Regulation (FDER) recognized that Florida's original PSD State Implementation Plan (SIP) submittal and EPA's subsequent 1983 conditional SIP-approval for PSD did not apply to sources subject to the PPSA since the PPSA's Site Certification Board was, by State law, the sole permit-issuing authority for power plants in Florida. Accordingly, for power plants subject to the PPSA, the full delegation of PSD authority under which FDER had been operating since 1983 was revoked on November 5, 1985, and Florida was given partial delegation to conduct the technical and administrative portion of the federal PSD program. At that time, EPA resumed final PSD permit issuance and enforcement authority for PPSA sources only.

On July 1, 1986, the Florida Legislature amended the PPSA in an effort to extricate the implementation of PSD regulations and allow FDER to issue PSD permits to sources subject to the PPSA. On its face, the 1986 PPSA amendment appeared to provide FDER with authority to fully implement (i.e. issue and enforce) federal PSD regulations for sources subject to the PPSA. Thus, on September 25, 1986, EPA restored full PSD delegation authority to Florida for these sources.

A State appellate court decision in TECO Power Services Corp. v. Florida Department of Environmental Regulation, First DCA Case No. 91-300, December 20, 1991, declared that the 1986 PPSA amendment does not confer on FDER authority to issue a federally-enforceable PSD permit containing conditions which differ from those imposed by the PPSA Siting Board. The practical effect of the TECO decision was to render ineffective the 1986 PPSA amendment and to require, in the absence of further PPSA amendments, that EPA resume final permitting and enforcement authority over PSD permits for new PPSA sources. Consequently, by letter dated August 7, 1992, EPA revoked full delegation of PSD authority for power plants in Florida and returned to the partial delegation agreement outlined in the November 5, 1985, letter which granted the State the authority to implement the technical and administrative portions of the PSD program for PPSA sources.

Your letter presents amendments to the PPSA which took effect on April 22, 1993. These amendments expressly provide that the "[D]epartment's action on a federally required new source review or prevention of significant deterioration permit shall differ from the actions taken by the siting board regarding the certification if the federally approved state implementation plan requires such a different action to be taken by the department. Nothing in this part [the PPSA] shall be construed to displace the department's authority as the final permitting entity under the federally approved permit program." EPA has determined that the current PPSA statute gives the State the appropriate authority to issue and enforce PSD permits to sources subject to the PPSA.

We have determined that the procedures for new source review by the State of Florida provide an adequate and effective procedure for the implementation of the PSD program for the sources described above. Therefore, pursuant to 40 C.F.R. Subpart A (General Provisions), 40 C.F.R. §52.06 (Legal Authority), and 40 C.F.R. §52.21(u) (Delegation of Authority), we hereby delegate our authority for all portions of the Federal PSD program, as described in 40 C.F.R. §52.21, to the State of Florida for

sources subject to review under the PPSA located or to be located in the State of Florida and subject to review under the federal regulations for PSD, promulgated at 40 C.F.R. §52.21 as follows:

- A. EPA delegates its authority for the review of all sources which are subject to or reviewed under the Electrical Power Plant Siting Act located or to be located in the State of Florida and subject to review under federal regulations for the Prevention of Significant Air Quality Deterioration, promulgated in 40 C.F.R. §52.21.
- B. EPA delegates to the State of Florida its authority and procedures for technical review and evaluation of new sources and public participation pursuant to 40 C.F.R. §124.3-124.14, and its authority under 40 C.F.R. §124.15-124.19 to take final action on an application.
- C. For purposes of and in accordance with paragraph B above, the State of Florida shall follow the procedures in 40 C.F.R. §§124.3-124.19, except that the word "Director" and the phrase "Regional Administrator" shall mean "State Director." A copy of the State's preliminary determination, a copy of all materials submitted by the owner or operator of the source seeking the PSD permit, a copy or summary of the materials (if any) considered by the State in making its preliminary determination, and a copy of the notice shall be sent to the EPA Regional Office immediately upon issuance of a preliminary determination. Immediately upon issuance of a final determination, the state shall forward a copy of the final determination and final permit to the EPA Regional Office.
- D. This delegation is based upon the following conditions:
  1. Quarterly reports containing pertinent information relating to the status of sources subject to 40 C.F.R. §52.21 (or other reports as required by the Regional Administrator) will be submitted to EPA by the State of Florida as part of the existing reports normally submitted to EPA through program plan reporting.
  2. In accomplishing the delegated PSD review, the State of Florida will apply all applicable federal air permitting rules and follow the applicable federal permit processing procedures. If at any time it is determined that the state rules or statutes prohibit the Department from applying any such standard or procedure, the pertinent portion of the delegation may be revoked.



3. If the Regional Administrator determines that the state procedure for implementing the PSD program is inadequate, or is not being effectively carried out, this delegation may be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Florida Department of Environmental Protection.
4. Acceptance of this delegation of presently promulgated PSD regulations (40 C.F.R. §52.21, as amended 02/03/92) does not commit the State of Florida to accept responsibility for new federal standards or requirements promulgated after the effective date of this delegation.
5. Public availability of information shall be in accordance with 40 C.F.R. §52.21(q).
6. Enforcement of PSD in the State of Florida will be the primary responsibility of the Department of Environmental Protection. If the State determines that such enforcement is not feasible and so notifies EPA, or where the State acts in a manner inconsistent with the terms of this granted authority, EPA will exercise its concurrent enforcement authority pursuant to Sections 113 and 167 of the Clean Air Act, as amended, with respect to sources within the State of Florida subject to PSD requirements. In accordance with 40 C.F.R. 52.21(s) and Sections 113 and 167 of the Clean Air Act, 42 U.S.C. 7413 and 7477, the Environmental Protection Agency reserves the right to commence an enforcement action against any entity in violation of Prevention of Significant Deterioration should the State of Florida fail to take such an enforcement action or, in the opinion of EPA, fail to pursue a timely or appropriate enforcement action.
7. The State of Florida will ensure, through its interstate intergovernmental cooperation procedures, that all potential source interactions along State boundaries are properly determined.

The State and EPA will develop a system of communication sufficient to guarantee a program that includes the items described below:

- A. Each agency is informed of the current compliance status of subject sources in the State of Florida consistent with the State/EPA Enforcement Agreement.
- B. Prior EPA concurrence is obtained on any matter involving interpretation of 40 C.F.R. §52.21 (including unique questions of applicability of the standards).

This delegation of authority should not be construed as a transfer of PSD responsibility under Section 110(a)(2)(J) of the Clean Air Act, as amended. As you are aware, such transfer involves different procedures and considerations.

A notice announcing the granting of the full delegation of PSD authority to the State will be published in the Federal Register in the near future. The notice will state, among other things, that effective immediately, all reports required pursuant to PSD regulations by covered sources located in or to be located in the State of Florida should be submitted to the Bureau of Air Regulation, Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400.

Since the delegation of authority is effective immediately, there is no requirement that the State notify EPA of its acceptance. Unless EPA receives from the State written notice of objections within ten (10) days of receipt of this letter, the State will be deemed to have accepted all of the terms of the delegation.

Sincerely yours,



Patrick Tobin  
Acting Regional Administrator

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT

In the matter of an  
Application for Permit by:

Mr. Kent L. Fickett  
Cedar Bay Generating Company, L.P.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

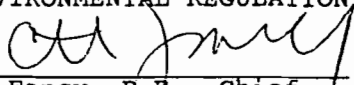
DER File No. PSD-FL-137A  
Duval County

Enclosed is revised/amended Permit Number PSD-FL-137A for the Cedar Bay Cogeneration Project at the existing Seminole Kraft Corporation facility in Jacksonville, Duval County, Florida. This permit is issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 11/23/93 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,  
on this date, pursuant to  
§120.52(11), Florida Statutes,  
with the designated Department  
Clerk, receipt of which is hereby  
acknowledged.

Barbara J. Boutwell 11/23/93  
(Clerk) (Date)

Copies furnished to:

- E. Frey, NE District
- S. Pace, RESD
- B. Oven, DEP
- R. Donelan, Esq., OGC
- J. Harper, EPA
- J. Bunyak, NPS

P 872 562 502



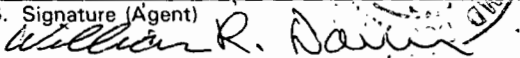

### Receipt for Certified Mail

No Insurance Coverage Provided  
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Sent to Mr. Kent L. Fickett	
Street and No. 7500 Old Georgetown Road	
P.O., State and ZIP Code Bethesda, Maryland 20814	
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TOTAL Postage & Fees	\$
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PS Form 3800, JUNE 1991

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Kent L. Fickett Cedar Bay Generating Company, L.P. 7500 Old Georgetown Road Bethesda, Maryland 20814		4a. Article Number P 872 562 502	
5. Signature (Addressee)		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent) 		7. Date of Delivery	
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.



# Florida Department of Environmental Protection

RECEIVED

Lawton Chiles  
Governor

Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7577

AUG 06 1993

Division of Air Resources Management  
Virginia B. Wetherell  
Secretary

August 2, 1993

RECEIVED

Ms. Janine G. Kelly  
Manager, Environmental Compliance  
Cedar Bay Generating Company, Limited Partnership  
7475 Wisconsin Avenue  
Bethesda, Maryland 20814

AUG 0 1993  
Division of Air Resources Management

Dear Ms. Kelly:

This letter is in response to your letter (attached) dated July 30, 1993 and your asking for a Northeast District interpretation of Condition of Certification C.4. As we discussed by phone on July 30, and after discussing this matter with the compliance and permitting engineers, our interpretation of Condition of Certification C.4 is that it does not preclude the use of fuel oil during boilout and other pre-startup procedures. We are in agreement with the EPA interpretation that boilout should be considered as part of source construction and not startup. Therefore, Cedar Bay Generating Company can continue to conduct pre-startup activities, such as tuning of the oil burners and boil out of the coal fired boilers (CFB's) using fuel oil. Please keep the Department as well as the Regulatory and Environmental Services Division informed of progress and ongoing activities leading up to startup at the site.

If you have any questions concerning this matter, please contact me at (904) 448-4310, extension 377.

Sincerely,

Robert J. Leetch, P.E.  
District Air Program  
Acting Administrator

Attachment  
RJL/rjl

cc: Robert S. Pace, P.E., RESD  
Hamilton S. Oven, P.E., Tallahassee  
John Brown, P.E., Tallahassee

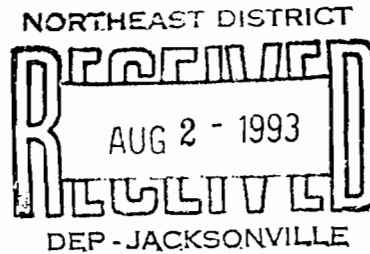
Administration 448-4300  
Air 448-4310  
Waste Management 448-4320



Water Facilities 448-4330  
Water Management 448-4340  
FAX 448-4366

**Cedar Bay Generating Company,  
Limited Partnership**

July 30, 1993



File #: 66.26.2

Mr. Robert Leach  
Florida Department of Environmental Protection  
Industrial Waste Section  
7824 Bay Meadows Way  
Suite B200  
Jacksonville, FL 32256

Dear Mr. Leach:

I appreciate you taking the time to review the Conditions of Certification with us. We are making every effort to uphold the letter and the spirit of all permit and regulatory requirements, and to keep you informed of our progress at the site.

As we discussed this Friday afternoon, I am confirming that the Department did not intend that Condition C.4 of the Conditions of Certification include fuel oil. In fact, you reported that this is standard practice. We also shared with you that we will continue to conduct pre-startup activities using fuel oil, such as tuning of the oil burners and boil out of the CFB's. Start up will commence with firing of coal which is currently scheduled for the first week of November.

Again, thanks for getting back with us so quickly and helping to keep the project on schedule.

Sincerely,

Janine G. Kelly  
Manager, Environmental Compliance

JK/mm

cc: Hamilton S. Oven, FDEP



# U.S. Generating Company

## Fax Message

DATE:

8/2/93

TO:

Bob Laach

FACSIMILE NO.:

(904) 448-4366

COMPANY:

Florida DEP

NO. OF PAGES:

4

(including this one)

CITY/STATE:

Jacksonville, FL

FROM:

Barnes Park

PHONE NO.:

301/718-6937

SPECIAL INSTRUCTIONS:

If transmittal is incomplete or illegible, please call at 301-718-6937

### Messages:

Print out of applicability determination

D-087. FYI.

*Barnes Park*







DATE: 08/02/93

APPLICABILITY DETERMINATION INDEX  
DOWNLOAD REPORT

PAGE 2

Selection Criteria:

REFERENCE = 60.2(o)

cc: DSSE, Attention: John Rasnic, Chief Compliance Monitoring

Branch

Michael J. Sanderson, Enforcement Division

P. A. Burrell, Enforcement Division

Henry F. Rompage, Enforcement Division

.....



# Florida Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

September 24, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED (Fed X<sup>2</sup>l: <sup>9-23-93</sup>)

Ms. Jewell Harper  
Air Enforcement Branch  
U.S. Environmental Protection Agency  
Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30065

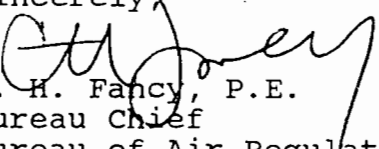
Re: Amendment/Revision of Permit No. PSD-FL-137

Dear Ms. Harper:

Cedar Bay Cogeneration, Inc. has requested that the referenced permit for the Cedar Bay Cogeneration Project (Project) be amended/ revised to include the reduced emission limitations recently adopted by the Siting Board of the State of Florida when it modified the Project's certification under Florida's Power Plant Siting Act. These emission reductions and related changes are associated with improvements in the air quality around the Project. This request is consistent with the Settlement Stipulation agreed to by all parties to the modification proceeding convened by Florida.

The Department finds the proposed revisions acceptable and has drafted the enclosed revised permit, No. PSD-FL-137A. Also enclosed for your review is a summary of and the record in the proceeding to modify the certification for the Project and a marked-up version of the previous permit, No. PSD-FL-137. Because this facility is subject to Florida's Power Plant Certification regulations, we request that EPA review and approve the enclosed draft and revised permit.

Sincerely,

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

CHF/BM/rbm

Enclosures

cc: S. Pace, RESD  
E. Frey, NED  
R. Donelan, Esq., OGC  
B. Overt, PPS  
K. Fickett, CBEI Fed X<sup>2</sup>l: <sup>9-23-93</sup>

9-23-93 PA  
RMA

Enclosures

**Final Determination**

**Cedar Bay Cogeneration Inc.  
Cedar Bay Cogeneration Project  
Duval County, Florida**

**Permit No. PSD-FL-137A**

**Florida Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation**

**September 24, 1993**

## Final Determination

Air Permit PSD-FL-137 was issued to the Cedar Bay Cogeneration Project (the Project) of AES/Cedar Bay, Inc. on March 28, 1991, following review by the Division of Air Resources Management of the permit application (part of the Power Plant Siting application) and following certification by the Governor and Cabinet siting as the Siting Board under the Power Plant Siting Act. That permit was issued based on a demonstration by the applicant that the Project would satisfy the requirements of all applicable air regulations.

After questions were raised about the applicant's intention to construct and operate the Project in conformance with the conditions of certification (and of the Air Permit) and appropriate findings were made, the Siting Board instituted proceedings under the Power Plant Siting Act to modify the conditions of certification for the Project. AES Cedar Bay, Inc., and Seminole Kraft Corporation v. State of Florida Department of Environmental Regulation, DOAH Case No. 88-5740. Those proceedings culminated in the execution of a Settlement Stipulation on April 13, 1993, by the Parties in the modification proceedings which included the Florida Department of Environmental Protection (DEP). In that Settlement Stipulation (Attachment 4 to the revised Air Permit), the Parties agreed to recommend to the Siting Board that it modify the Conditions of Certification for the Project to include, among other things, more stringent emission limitations. On May 11, 1993, the Siting Board followed that recommendation and adopted an order modifying the conditions of certification.

Paragraph 23 of that Settlement Stipulation calls for amendment of the Air Permit for the Project to reflect the modifications that are applicable to the Project's Air Permit. According to paragraph 23 of the Settlement Stipulation, only the modifications recommended for the Conditions of Certification in paragraphs 4 and 6 of the Settlement Stipulation should not be included in the amended Air Permit for the CBCP, since those conditions are not applicable to that Permit.

Consistent with the terms of the Settlement Stipulation and in response to a request by the permittee, the CBC, Inc. (the new corporate name for the permittee), DEP has determined that the Air Permit should be revised to reflect the changes noted in the Settlement Stipulation. Accordingly, DEP is recommending to EPA that it officially revise the Air Permit to incorporate these changes.

The key technical changes to the Air Permit, which will result in substantial emission reductions from the Project, are as follows:

- A. Lower the limitations applicable to the emissions from the circulating fluidized bed boilers (CFBs) of SO<sub>2</sub>, NO<sub>x</sub>, CO, PM, PM-10, H<sub>2</sub>SO<sub>4</sub>, fluorides, lead, mercury, and beryllium consistent with the Conditions of Certification.

1. The restrictions on the sulfur content of the coal fired in the CFBs have been tightened, and the CBC will make operational changes in the limestone injection system to comply with the lower emission limitations for SO<sub>2</sub> and other acid gases.
  2. SNCR will be added to the CBCP to augment the low NO<sub>x</sub> performance of the CFBs, and an emission limitation for ammonia has been added.
  3. Enhanced combustion management will achieve lower CO emissions.
  4. Operational changes have been incorporated for the flue gas fabric filters to achieve lower PM emission limitations.
  5. Lower emission limitations are now possible for trace elements with this improved baghouse performance and revised emission factors.
  6. New technologies will be tested for additional mercury removal.
- B. Provide for compliance with the CFBs' opacity requirements and emission limitations for SO<sub>2</sub>, CO, and NO<sub>x</sub> to be determined using Continuous Emission Monitors as well as stack tests.
- C. Include permission for --
1. Two of the CFBs to burn short fiber recycle rejects from Seminole Kraft Corporation (SKC).
  2. The CFBs to operate at a furnace heat load below 70%.
  3. An increase in the use of fuel oil during the CFBs' start-ups from 0.16 million gpy to 1.9 million gpy.
  4. Reduce the allowable sulfur content of the fuel oil used in the CFBs during start-up to 0.05% by weight.
- D. For the limestone dryers --
1. Decrease their allowable hours of operation.
  2. Reduce the allowable sulfur content of the fuel oil used in them to 0.05% by weight.

- E. For other sources in the material handling and treatment area --
1. Reduce the allowable grain loadings by a factor of 10 for the point sources controlled with baghouses and by a factor of 3 for the point sources controlled with wet control systems.
  2. Rely on compliance tests based on visible emissions and grain loadings.

This recommendation is also based on the DEP findings that these emission reductions will in turn reduce the air quality impacts from the Project. In February of this year, ENSR submitted to DEP its "CBCP Air Quality Analysis;" and in March of this year, a number of replacement pages for this report were filed with DEP. ENSR's work shows (1) regional improvements in air quality with respect to the CBCP as originally certified and with respect to SKC's existing power and bark boilers, and (2) some increment expansions in the CBCP's significant impact area. These comparisons hold even when SKC's new package boilers are added to the impacts of the CBCP.

Accordingly, and as DEP reported in its March 25, 1993 staff report on the Project, the Project complies with all air quality requirements. Specifically, the CBCP will continue to comply with applicable PSD requirements: (1) the control technology planned for the CBCP will satisfy BACT requirements for all pollutants subject to new source review; (2) the emissions from the CBCP will not cause or contribute to a violation of the ambient standards or the PSD increments; (3) the CBCP will not have an adverse impact on the air quality related values of any class I area; (4) the CBCP will not adversely affect visibility, soils, or vegetation having significant commercial or recreational value; and (5) analyses show that any growth associated with the CBCP will not have significant air quality impacts.

Similarly, ENSR's Report indicates that the Project clearly continues to comply with applicable ozone nonattainment requirements: (1) the Project will satisfy the LAER requirement for VOCs; (2) the Project's VOC emissions will be more than offset by the shutdown of SKC's bark and power boilers; and (3) these offsets will result in a net air quality benefit. Finally, CBC, Inc. does not have any sources in Florida that are out of compliance with their air quality requirements; and Florida has an effective SIP for ozone.

That the Project satisfies all applicable requirements is also reflected in paragraph 2 of the Settlement Stipulation and in the final action taken by the Siting Board on the Conditions of Certification for the CBCP on May 11, 1993.

Under EPA's guidance on permit modifications, changes that do not involve increases in source emissions or in air quality impacts may be considered permit "amendments," which may be accomplished through simple administrative action without further public review or proceedings. (United States Environmental Protection Agency, Office of Air Quality Planning



and Standards, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985) at p. 11.) No increases in emissions or air quality impacts will occur for the Project. Accordingly, DEP finds that there is no need for public notice or comment prior to DEP's recommendation or to EPA's revising the Project's Air Permit consistent with the final determination.

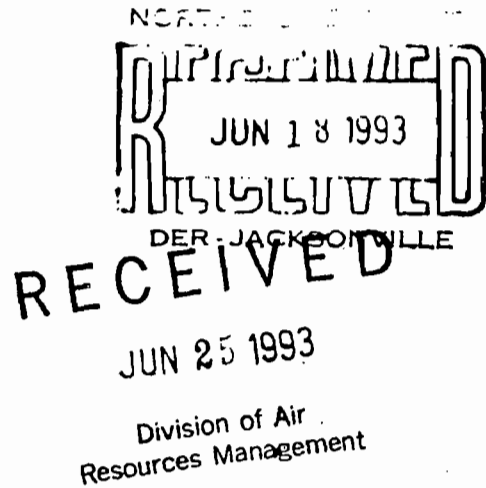
**Cedar Bay Generating Company,  
Limited Partnership**

June 11, 1993

**VIA CERTIFIED MAIL**  
**Receipt No. P 210 277 885**

Mr. Patrick Tobin  
Acting Regional Administrator  
United States Environmental Protection Agency  
Region IV  
345 Courtland Street, NE  
Atlanta, GA 30365

Re: Cedar Bay Cogeneration Project  
Duval County, Florida



Dear Mr. Tobin:

I am writing to update you regarding the air quality and other improvements recently ordered by the State of Florida for the Cedar Bay Cogeneration Project (the Project). This facility was originally certified pursuant to the Florida Power Plant Siting Act (PPSA) in February 1991 and permitted pursuant to the State of Florida's approved air program in March 1991. This letter is to inform EPA of certain modifications to the Project's Site Certification, such as reduced air emissions and air quality impacts.

In the summer of 1992, a proceeding was initiated to revise the State requirements for the Project. That proceeding recently culminated in a Settlement Stipulation, entered into by all of the parties (Attachment A to this letter) and approved by the Siting Board on May 11, 1993 (Attachment B to this letter). The Siting Board's Order calls for significant reductions to both the Project's air emissions and its air quality impacts. Moreover, in Paragraph 23 of the Settlement Stipulation, the Parties agreed that the Project's air permit should also be revised to reflect the agreed upon emission reductions and other improvements to ensure that they are federally enforceable. The Project is working with Florida's Department of Environmental Regulation (DER) to effectuate this requirement.

Effective August 7, 1992, EPA revoked DER's authority to implement the federal PSD program with respect to power plants subject to Florida's PPSA because of inconsistencies between the PPSA and EPA's PSD program.<sup>1/</sup> Until EPA returns permitting authority to Florida, EPA is responsible for final approval and issuance of PSD permits for facilities subject to the PPSA. As a result, under currently applicable procedures, DER would conduct the technical and administrative review for, and EPA would issue any revisions to, the air permit for the Project.

<sup>1/</sup> 55 Fed. Reg. 54, 931 (Nov. 23, 1992).



June 11, 1993

Page 2

In April 1993, after the Settlement Stipulation was signed, the Florida Legislature amended the PPSA in a way that should harmonize Florida's PPSA regulatory program with EPA's PSD guidelines. We understand that Florida plans to petition EPA for a return of its PSD authority in due course. However, given the uncertainty when the Settlement Stipulation was signed as to who would issue the revisions to the Project's air permit and when it would be revised, Paragraph 21 was included in the Settlement Stipulation. That Paragraph provides that "[w]ithin 30 days following final action by the Siting Board approving the modifications of the site certification," the project would alert EPA to the fact that the Project will be operated as though the applicable "provisions [of the new conditions of certification] were [already] incorporated into the existing air permit and accepts them as federally enforceable." (See Paragraphs 21 and 23.)

This letter is in satisfaction of the requirements set forth in Paragraphs 21 and 23 of the Settlement Stipulation. Thus, the Project hereby notifies EPA that the Project will be operated in compliance with the current provisions of the Conditions of Certification and of the Settlement Stipulation "as though they were incorporated into the air permit and accepts them as federally enforceable."

We look forward to working with EPA on these and other air quality matters as they may arise. If you have any questions, please do not hesitate to call Mark Carney at (301) 718-6899.

Sincerely,



Bernard E. Seals  
President and CEO

Attachments

cc: Parties of Record, w/o attachments  
Kent Fickett, w/o attachments  
Mark Carney, w/o attachments  
Clair Fancy, DER, w/o attachments

BES/ldbr



**Cedar Bay Generating Company,  
Limited Partnership**

August 13, 1993

RECEIVED

AUG 16 1993

Division of Air  
Resources Management

C. H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**Cedar Bay Cogeneration Project**  
**Permit No.: PSD-FL-137**

Dear Mr. Fancy:

In response to our recent telephone conversation, I write to provide the materials that you need to support your recommendations to EPA that it revise Permit No.: PSD-FL-137 (the Air Permit) for Cedar Bay Cogeneration, Inc.'s (CBC's) Cedar Bay Cogeneration Project (the Project). Because the Project is subject to Florida's Power Plant Siting Act and because EPA wants to make final decisions on PSD permits for such facilities, a copy of this letter is being forward to Region IV.

As you recall, on April 13, 1993, the Parties to AES Cedar Bay, Inc., and Seminole Kraft Corporation v. State of Florida Department of Environmental Regulation, DOAH Case No. 88-5740, including the Florida Department of Environmental Protection (DEP) and CBC, filed a Settlement Stipulation with the Hearing Officer. In that Stipulation, the Parties agreed to recommend to the Siting Board that it modify the Conditions of Certification for the Project to include, among other things, more stringent emission limitations. On May 11, 1993, the Siting Board followed that recommendation and adopted an order modifying the conditions of certification.

Because Paragraph 23 of that Settlement Stipulation expressed the Parties' view that the Air Permit for the Project needed to be amended to include the recommended modifications that are applicable to the Project's Air Permit, we appreciate your focusing on revising the Air Permit. The needed changes are summarized in Enclosure 1.

As you can see from this summary, the changes ordered by the Siting Board, in accordance with the Settlement Stipulation, will result in substantial emission reductions from the Project. These emission reductions will in turn reduce the air quality impacts from the Project.



August 13, 1993

Page 2

Under EPA's guidance on permit modifications, changes that do not involve increases in source emissions or in air quality impacts may be considered permit "amendments," which may be accomplished through simple administrative action without further public review or proceedings. (United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985) at p. 11.) In any event, the Air Permit amendments that are the subject of this letter have already been fully disclosed, debated, and resolved as part of the Site Certification process; and the Settlement Stipulation suggests no further formal proceedings are desired by the parties.

To facilitate your processing of our request, we have also enclosed three other documents:

Enclosure #	Contents
2	A marked-up version of the current Air Permit
3	A clean version of the Air Permit as we would recommend that it be revised
4	A draft package for you to send to EPA should you accept our recommendations

If you have any questions, please do not hesitate to call me at 301/718-6899.

Sincerely,

*Mark V. Carney*  
Mark V. Carney

Enclosures

cc: Patrick M. Tobin  
Jewell Harper  
Gregory Worley  
Richard Donelan



**SUMMARY OF CHANGES TO THE PROJECT'S AIR PERMIT**

## **SUMMARY OF CHANGES TO THE PROJECT'S AIR PERMIT**

CBC recommends the following changes in the Air Permit for the Project to reflect the May 11, 1993 Order of the Siting Board that was entered following settlement consistent with the recommendations of the DEP and with the evolving designing and construction of the Project:

### **ADMINISTRATIVE CHANGES IN OWNER**

1. Cedar Bay Cogeneration, Inc., is a general partner and the sole limited partner of Cedar Bay Generating Company, Limited Partnership. The other general partner of Cedar Bay Generating Company, Limited Partnership is Cedar II Power Corporation, which is indirectly partially owned by a subsidiary of Bechtel Enterprises, Inc. Cedar Bay Cogeneration, Inc. was formerly known as AES Cedar Bay, Inc. Cedar Bay Cogeneration, Inc. is indirectly partially owned by a subsidiary of PG&E Enterprises. The change in the name of the permit from AES Cedar Bay, Inc. to Cedar Bay Cogeneration, Inc. is to reflect the change in project ownership, as described above.

### **REDUCTION IN STACK EMISSIONS FROM THE CFBs**

2. The Project's circulating fluidized bed boilers ("CFBs") will be operated with the emissions summarized in Table 1, which are substantially lower than those in the current Air Permit. As indicated in that table, the Project will achieve lower emissions of (a) SO<sub>2</sub> and acid gases with further restrictions on the sulfur content of the coal to be burned and by feeding to its CFBs limestone of the requisite quality and quantity; (b) NO<sub>x</sub> by installing a selective non-catalytic reduction system; (c) particulate matter (and trace metals) by enhancing maintenance of the fabric filter; and (d) CO by properly managing combustion. The sulfur content of the Project's start-up oil is also being reduced to 0.05%. These parameters that are associated with lower emissions should be reflected in the first page of the Air Permit and in Permit Conditions II.A.1.d. and e., A.2., A.3.-9., C.5., and C.6. and a new provision A.4.

3. An innovative technique for possible further reductions in mercury emissions is to be tested on one of the Project's CFBs. Language to reflect this test program should be added to Specific Condition II.A.2.

### **REFINEMENTS IN DESIGN AND OPERATION OF THE LIMESTONE DRYERS AND OTHER MATERIALS HANDLING EQUIPMENT**

4. The limestone dryers can produce the limestone needed for input to the CFBs by operating 11 hours per day and 2920 hours per year. This change has the effect of, for example, reducing the annual emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM, CO, and VOCs from the dryers by two thirds. The sulfur content of the limestone dryers' fuel oil can also be reduced to 0.05%. For certain other materials handling equipment, additional emission controls have been

incorporated into the design of the Project as has a more conservative method for characterizing aggregate emissions from materials handling equipment controlled with fabric filters. Language to reflect these refinements should be added to Specific Conditions II.B.1.-8., and new B.6 should be inserted.

### OPERATIONAL PARAMETERS

5. Though the existing limitations on the Project's total heat input and coal usage are still current, changes to three operational parameters that could affect coal usage are warranted:

A. The Air Permit currently requires the Project to maintain boiler load between 70% and 100% of the design rated heat capacity. Because the Project can be dispatched by the Florida Power and Light Company and since the Project can meet its environmental requirements at lower loads, Specific Condition II.A.9.b. was revised in order to allow operation of the Project at lower loads, in response to swings in load demand.

B. Given recent experience with the type of CFBs to be used at the Project, a greater number of start-ups and shutdowns are anticipated in the first two years of operation as the Project completes its shake-down period. As a result, an increase in the total amount of low sulfur oil burned during facility start-up is anticipated. An amendment to Specific Conditions II.A.1.e. and B.7. is needed to allow for an increase in the use of low sulfur oil for start-ups of the Project.

C. The CFBs at the Project are currently permitted to derive as much as 4% of their heat input from the firing of waste bark from Seminole Kraft Corporation's (SKC's) pulping operation. However, with SKC's conversion of its pulping operation to a recycling system, short fiber recycle rejects and not bark waste will be available for the Project's use. Because the carbonaceous material in the recycle rejects can replace some of the Project's coal and because the recycle rejects would have to be land-filled if not burned, the Project proposes a test to ascertain whether it is technically feasible to burn recycle rejects in two of its CFBs and whether they can burn recycle rejects in compliance with proposed emission limitations and other legal requirements. The Project is seeking approval to burn as much as 420 cubic yards per day of recycle rejects as an alternative boiler fuel for two of the CFBs if these two conditions are satisfied. Revision of the first page of the Air Permit and Specific Conditions II.A.1.b., A.1.h., and A.9.c. would permit this process to proceed.

6. Since the Project does not expect to utilize natural gas as a start-up fuel for the CFBs or as a fuel for the limestone dryers, the provision for this alternative fuel in Specific Conditions II.A.1.e., A.9.c., B.6., and B.7. can be deleted from the Air Permit.



## MISCELLANEOUS REVISIONS

7. Also needed are a number of ministerial revisions: changes throughout the Air Permit to reflect renumbering of applicable regulations; changes on the first page of the Air Permit to reflect recent PSC orders; clarifying changes in the wording of General Permit Condition 13 to confirm that the Project's terms and conditions satisfy all requirements of the applicable preconstruction permit programs; and changes to language in Specific Conditions II.1., A.1.f. and g., A.6., A.8.f., A.10., B.2. (Note), B.4, B.5, C.1, C.3, and D. of the Air Permit to enable it to better describe the Project, as modified, and to maintain consistency with the conditions of certification. In addition, new provisions II.A.13.-16., C.10. and E. need to be added. Finally, changes throughout the Air Permit are needed to make it internally consistent.

**TABLE 1: COMPARISON OF CFB EMISSIONS, AS PERMITTED VERSUS AS MODIFIED**

Annual Emissions (tons per year) of the Project's CFBs

<u>Emissions</u>	<u>As Permitted</u>	<u>As Modified</u>	<u>Method</u>
<b>Particulates</b>			
PM-10	257	234	Enhanced Maintenance for the Fabric Filtration of PM-10 and Trace Metals
Lead	91	0.78a	
Beryllium	1.5	0.11a	
Hg	3.4	0.38a	
<b>Acid Gases</b>			
SO <sub>2</sub>	4,015	2,598	Lower Sulfur Coal and Higher Ca/S Ratio Supplied to the CFBs
Fluorides	1,122	9.7a	
H <sub>2</sub> SO <sub>4</sub> Mist	308	6.1	
NO <sub>x</sub>	3,767	2,208	Add SNCR
<b>Products of Incomplete Combustion</b>			
CO	2,468	2,273	Improved Combustion Controls
VOCs	195	195	
<b>Totals</b>	<b>12,227.9</b>	<b>7,525.07</b>	

a These reductions are due in part to revised emission factors for the Project's coal supply.

MARKED-UP VERSION OF THE AIR PERMIT



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Leamon Childs, Governor

Carol M. Browner, Secretary

March 28, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeff Swain  
AES/Cedar Bay Inc.  
1001 North 19th Street  
Arlington, Virginia 22209

Dear Mr. Swain:

Re: AES/Cedar Bay Inc.  
Cogeneration Project, PSD-FL-137

Please find enclosed the above referenced permit. You have the right to petition for an administrative hearing pursuant to Section 120.57, Florida Statutes, within 14 days of receipt of this permit or file a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within 30 days from the date this permit is filed with the Clerk of the Department. Further, you may request a public hearing. Such request must be submitted within 30 days of receipt of this permit.

If you have any questions, please call Barry Andrews at (904)488-1344 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/kt

enclosure

cc: J. Harper, EPA  
A. Kutyna, NE District  
K. Kurts, BESD  
T. Cole, Oertel & Hoffman

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on 3-29-91.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Lyni Cohen  
Clerk

3-29-91  
Date

**Final Determination**

**AES/Cedar Bay Inc.  
Cogeneration Project  
Duval County, Florida**

**Permit No: PSD-FL-137**

**Florida Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation**

**March 28, 1991**

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Final Determination

AES/Cedar Bay, Inc.'s PSD permit application (part of the Power Plant Siting application), has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated March 27, 1991 (see attachment 2) are addressed below.

Public Notice

The EPA questioned why the notice was published on the same date that the Site Certification Hearing was scheduled to begin, thereby not providing a 30 day notice and comment period.

Notice was published originally on December 8, 1989, for a January 8, 1990 hearing. A copy of the proposed Notice was sent to Region IV on December 1, 1989 for review. No comments were received regarding the increment consumptions reflected in the Notice sent to EPA. The hearing was then postponed from January 8, 1990 to February 5, 1990. The hearing then had to be continued on February 20, 1990 for which the Notice was published on February 12, 1990. In addition, public access hearings were held on February 7, 1990 and February 21, 1990 for nonparty members of the public. The public always has the right to speak. Only if they intervene as a formal party do they need an attorney as required by Florida law.

BACT Analysis

The Department agrees with EPA that add-on NOx controls are technically feasible for the AES/Cedar Bay project. The decision to establish the NOx limitation at 0.29 lb/MMBtu was based on the overall benefits that would be obtained from the construction of the cogeneration facility (the additional cost of SNCR would cause the project to become financially unfeasible). The circulating fluidized bed (CFB) boilers will replace older boilers which have higher emissions per heat input. In addition, the 0.29 lb/MMBtu limitation was judged to be the most stringent limitation placed on a coal fired boiler which does not have add-on NOx controls.

For sulfur dioxide, the Department evaluated the cost of switching to a lower sulfur coal and determined that such a cost was prohibitive. It should be noted that the decision to limit the average annual sulfur content to 1.7 percent is well below the initial proposal of 3.3 percent by the applicant. With regard to the control efficiency, the Department believes that 90 percent efficiency is reasonable for the CFB design.

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# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

Cedar Bay Cogeneration, Inc  
7475 Wisconsin Avenue  
Bethesda, MD 20814-7422

PERMITTEE:  
S/Cedar Bay, Inc.  
01 North 19th Street  
Arlington, VA 22209

Permit Number: PSD-FL-137  
County: Duval  
Latitude/Longitude: 30°25'21"W  
81°26'23"W

Project: Cedar Bay Cogeneration Project (CBCP) (FAC)

This permit is issued under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code Chapters 17-20 and 17-4. The above named permittee is hereby authorized to perform the work to operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

This permit is for the installation of an integrated cogeneration power plant complex at the Seminole Kraft Corporation facility located in Jacksonville, Florida. The power complex will consist of three ~~oil/bark~~ <sup>coal</sup> fired circulating fluidized bed (CFB) boilers, the respective coal handling equipment, and limestone dryers, to be owned and operated by ~~APS Cedar Bay, Inc.~~ <sup>Cedar Bay Cogeneration</sup> and operated under contract with the U.S. Operating Semtex Company. The three CFB boilers, ~~rated at 3,189 MMBtu/hr~~ <sup>rated at 3,189 MMBtu/hr</sup>, will burn fuel made up of approximately ~~96 percent coal and 4 percent bark~~ <sup>96 percent coal</sup>. The boilers will generate steam to produce power from a turbine generator set. The cogeneration facility will generate ~~225 MW~~ <sup>225 MW</sup> of electricity for sale to Florida Power & Light as well as low pressure process steam for the Seminole Kraft Corporation.

Nitrogen oxides will be controlled by the good combustion characteristics which are an inherent part of the CFB technology. Sulfur dioxide will be controlled by limiting the average annual sulfur content to ~~1.7%~~ <sup>1.2%</sup> and the inherent limestone scrubbing provided by the CFB technology. Particulates will be controlled with fabric filters.

Construction shall be in accordance with the permit application and additional information submitted except as otherwise noted in the Specific Conditions.

### Attachments:

- Power plant site certification package PA 88-24 and its associated attachments, dated January 19, 1990.
- Letter from EPA dated March 27, 1991.
- DER's Final Determination dated March 28, 1991. (see back of page)

whose principal fuel will be coal; <sup>3</sup> a cooling tower; <sup>5</sup> largely or exclusively coal ash, and other material <sup>4</sup> permitted to input heat at the rate of <sup>6</sup> with the possibility that two CFBs will fire some short fiber recycle



**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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 of 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 acknowledgement 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 therefor; 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.

PERMITTEE: <sup>Cogeneration</sup>  
~~ABG~~ Cedar Bay Inc.

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GENERAL CONDITIONS:

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 any 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 proscribed by Sections 403.73 and 403.111, Florida 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,

*Cogeneration*  
**PERMITTEE:**  
 ABB/Cedar Bay Inc.

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**GENERAL CONDITIONS:**

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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- a. (x) Determination of Best Available Control Technology (BACT)
- b. (x) Determination of Prevention of Significant Deterioration (PSD)
- c. (x) Compliance with New Source Performance Standards and with *New Source Review for Non-attainment*

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 for 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.

Cogeneration :

PERMITTEE:  
AES/Cedar Bay Inc.

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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.

II SPECIFIC CONDITIONS:

1. The construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-2, F.A.C.. In addition to the foregoing, AESCB shall comply with the following conditions of certification as indicated. CBCP

A. Emission Limitations for AES Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr, 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr, 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

see back of page

~~b. The maximum wood waste (primarily bark) charging rate to the No. 1 and No. 2 CFBs each shall neither exceed 15,653 lbs/hr, nor 63,760 TPY. This reflects a combined total of 31,306 lbs/hr, and 127,521 TPY for the No. 1 and No. 2 CFBs. The No. 3 CFB will not utilize woodwaste, nor will it be equipped with wood waste handling and firing equipment.~~

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr for all three units.

d. The sulfur content of the coal shall not exceed 1.7% by weight on an annual basis. The sulfur content shall not exceed 3.3% by weight on a shipment (train load) basis.

1,900,000

e. Auxiliary fuel burners shall be fueled only with natural gas or No. 2 fuel oil with a maximum sulfur content of 0.3% by weight. The fuel oil or natural gas shall be used only for startups. The maximum annual oil usage shall not exceed 160,000 gals/year, nor shall the maximum annual natural gas usage exceed 22.4 MMCF per year. The maximum heat input from the fuel oil or gas shall not exceed 1120 MMBtu/hr for the CFBs.

\* normally only be used for

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Note: ~~and other~~ Conditions 1.h, 2.c, 2.d, 2.e, and 4 on back side of page

PERMITTEE:  
 Cogeneration  
 ASB/Cedar Bay Inc.

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f. The CFBs shall be fueled only with the fuels permitted in Conditions 1a, 1b, and 1c above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to ~~condition III, Modification of Condition II.A.12 and B.11.~~ SK  
visit  
note

g. The CFBs may operate continuously, i.e., 8760 hrs/yr., but shall not exceed  $25.98 \times 10^6$  MMBtu/yr total annual heat input.  
 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection <sup>and fuel sulfur limitations,</sup> for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu		Emission Limitations					
			lbs/hr	TPY	TPY for 3 CFBs			
CO	0.15	0.175 <sup>1</sup>	202	186 <sup>1</sup>	823	758	2468	2273
NOx	0.29	0.17 <sup>2</sup>	308.3	180.7 <sup>2</sup>	1256	736.1	3767	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	0.60 (1-hr avg)	637.8	255.1 <sup>3</sup>	--	--	--	--
	0.20 <sup>4</sup>	0.31 (12-MRA)	129.5	1338	86.6	4015	2598	
VOC	0.015		16.0		65		195	
PM	0.020	0.018	21.3	19.1	87	78	260	234
PM <sub>10</sub>	0.020	0.018	21.3	19.1	86	78	257	234
H <sub>2</sub> SO <sub>4</sub> mist	0.024	4.66 e-04	25.5	0.50	103	2	308	6.1
Fluorides	0.086	7.44 e-04	91.4	0.79	174	3.2	1122	9.7
Lead	0.007	6.03 e-05	7.4	0.06	30	0.26	91	0.78
Mercury	0.00028	2.89 e-05	0.278	0.03	1.13	0.13	3.4	0.38
Beryllium	0.00011	8.70 e-06	0.117	0.01	0.5	0.04	1.5	0.11

[Note: TPY represents a 93% capacity factor.] ~~MRA refers to a twelve month rolling average.~~

5. f. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. f. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, <sup>1992</sup> ~~1988~~ version of 40 CFR Parts 60 and 61, and ~~listed in Condition No. 7 of this permit or by equivalent methods after prior DER approval.~~ (see top of next page)

- (1) Eight hour rolling average, except for initial and annual compliance tests and the CEM certification, when 1-hour standard applies.
- (2) Thirty-day rolling average
- (3) Three-hour rolling average
- (4) Twelve-Month rolling average (Page 6 of 13 (MRA))

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Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NOx and SO2 and with the capacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMS) identified in Condition No. II.A.9.

PERMITTEE: ~~ABC~~ Cedar Bay <sup>Loge</sup> Inc.

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7. The CFBs are subject to 40 CFR Part 60, Subpart <sup>A and Dg;</sup> Dg; except that where requirements within this Certification are more restrictive, the requirements of this certification shall apply. <sup>permit</sup>

8. Compliance Tests for each CFB <sup>permit</sup>

a. Initial <sup>and subsequent ammonia;</sup> compliance tests for PM/PM10, SO2, NOx, CO, VOC, lead, fluorides, mercury, beryllium and H2SO4 mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, <sup>CO,</sup> SO2 and NOx, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate of each permitted fuel.

e. The following test methods and procedures of <sup>DEP</sup> 40 CFR Parts 60 and 61 or other DEP approved methods with prior DEP approval shall be used for compliance testing: <sup>Rule 17-297, F.A.C., and</sup>

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O2 and CO2.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO2.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead. <sup>13A or</sup>
- (12) Method ~~13B~~ for fluorides.
- 14 (13) Method ~~25A~~ for VOCs. <sup>18 or</sup>
- 15 (14) Method ~~101A~~ for mercury. <sup>or EPA Method 29</sup>
- 6 (15) Method 104 for beryllium.

(13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.

(17) Method 201 or 201A for PM10 emissions.

Note: see back of page for content of 9 and 9f

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- 9 ~~s. Continuous Emission Monitoring for each CFB AFSCB shall use Continuous Emission Monitors (CEMS) to determine compliance. CEMS for opacity, SO<sub>2</sub>, NOx, CO, and O<sub>2</sub> or CO<sub>2</sub>, shall be installed, calibrated, maintained and operated for each unit, in accordance with 40 CFR 60.47a and 40 CFR 60 Appendix F.~~
- ~~a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.~~
- a ~~b. CEMS data shall be recorded and reported in accordance with Chapter 17-2, F.A.C., and 40 CFR 60. A record shall be kept for periods of startup, shutdown and malfunction.~~ <sup>17-297</sup> <sup>60.49a and 60.7</sup>
- b ~~c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.~~
- c ~~d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.~~
- d ~~e. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).~~
- e ~~f. For purposes of reports required under this <sup>permit</sup> certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 10 herein, which exceeds the applicable emission limit in Condition No. 3.~~
- 10 ~~g. Operations Monitoring for each CFB~~ <sup>II.A.11</sup> <sup>II.A.3</sup>
- a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.
- ~~b. The furnace heat load shall be maintained between 70% and 100% of the design rated capacity during normal operations.~~
- b ~~c. The coal, bark, natural gas and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.~~ <sup>All</sup>

Note: See back of page for A.13., A.14., A.15., and A.16.

PERMITTEE: <sup>Loganathan</sup>  
AES/Cedar Bay Inc.

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11 ~~10~~. Reporting for each CFB

testing

a. A minimum of thirty (30) days prior <sup>DEP</sup> notification of compliance <sup>written</sup> test shall be given to DER's N.E. District office and to the BESD (Bio-Environmental Services Division) office, in accordance with 40 CFR 60.8. ←

b. ~~The~~ results of compliance test shall be submitted to the BESD office within 45 days after completion of the test <sup>last</sup> run. ←

c. The owner or operator shall submit excess emission reports to BESD <sup>RESD</sup> in accordance with ~~40 CFR 60.~~ <sup>Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d).</sup> The reports shall include the following: ←

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR §60.7(c)(1)). ←

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measured adopted (40 CFR §60.7(c)(2)). ←

(3) The date and time identifying each period during which the ~~...~~ continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR §60.7(c)(3)). ←

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR §60.7(c)(4)). ←

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection ~~(60.7(d)).~~ (40 CFR 60.7(e)). ←

d. Annual and quarterly reports shall be submitted to BESD <sup>RESD</sup> as per F.A.C. Rule ~~17-2.700(7)~~ <sup>297.500</sup>, F.A.C. ←

12 ~~11~~. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to F.A.C. Rule ~~17-2.100~~ defining modification, shall be submitted for approval to DER's Bureau of Air Regulation. ←

<sup>212.200, F.A.C.</sup>  
↓  
DEP



PERMITTEE: ~~225 Cedar Bay Inc.~~ <sup>Cogenation</sup>

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CBCP

B. ~~APS~~ - Material Handling and Treatment

- The material handling and treatment operations may be ~~continuous, i.e. 2760 hrs/yr~~ <sup>see back of previous page</sup> ←
- The material handling/usage rates <sup>for coal, limestone, fly ash, and bed ash</sup> shall not exceed the following: ←

Material	Handling/Usage Rate	
	TPM	TPY
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions <sup>and 700,800</sup> from the maximum No. 2 fuel oil utilization rate of 240 gals/hr, ~~2,100,000~~ gals/year for the limestone dryers; and 8000 gals/hr, ~~150,000~~ gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows: <sup>and 1,900,000</sup>

a. ~~The maximum emissions from the material handling and treatment area, where baghouses are used as controls for specific sources, shall not exceed those listed below (based on AP-43 factors):~~ sources with either fabric filter or baghouse controls are as follows: (see back of page) for list

Source	Particulate Emissions	
	lbs/hr	TPY
<del>Coal Rail Unloading</del>	<del>neg</del>	<del>neg</del>
<del>Coal Belt Feeder</del>	<del>neg</del>	<del>neg</del>
<del>Coal Crusher</del>	<del>0.41</del>	<del>1.78</del>
<del>Coal Belt Transfer</del>	<del>neg</del>	<del>neg</del>
<del>Coal Silo</del>	<del>neg</del>	<del>neg</del>
<del>Limestone Crusher</del>	<del>0.06</del>	<del>0.28</del>
<del>Limestone Hopper</del>	<del>0.01</del>	<del>0.03</del>
<del>Fly Ash Bin</del>	<del>0.02</del>	<del>0.10</del>
<del>Bed Ash Hopper</del>	<del>0.06</del>	<del>0.25</del>
<del>Ash Silo</del>	<del>0.06</del>	<del>0.25</del>
<del>Common Feed Hopper</del>	<del>0.03</del>	<del>0.13</del>
<del>Ash Unloader</del>	<del>0.01</del>	<del>0.06</del>

The emissions from the above listed sources and the limestone dryers are subject to the particulate emission limitation requirement of 0.03 gr/dscf. However, ~~neither DER nor DESD will require particulate tests in accordance with EPA Method 5 unless the~~

0.003

(Applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991) version

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~~VE limit of 5% opacity is exceeded for a given source, or unless DER or BESC, based on other information, has reason to believe the particulate emission limits are being violated.~~

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area, ~~in accordance with F.A.C. Chapter 17-2. (see back of page)~~

7.6. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	Estimated Limitations					
	lbs/hr		TPY		TPY for 2 dryers	
PM/PM <sub>10</sub>	0.25	0.24	1.1	0.32	2.2	0.64
SO <sub>2</sub>	5.00	0.85	21.9	1.15	43.8	2.3
CO	0.60		2.8	0.81	5.2	1.62
NOx	2.40		10.5	3.25	21.0	6.5
VOC	0.05		0.2	0.06	0.4	0.12

Visible emissions from the dryers shall not exceed 5% opacity. ~~If natural gas is used, emissions limits shall be determined by factors contained in AP-42 Table 1. 4-1, Industrial 10/86.~~

8.7. The maximum <sup>sulfur content of</sup> No. 2 fuel oil <sup>should not exceed 0.05% by weight. The maximum</sup> firing rate for each limestone dryer shall not exceed 120 gals/hr, or ~~2,050,000~~ <sup>350,400</sup> gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr, and ~~2,100,000~~ <sup>700,800</sup> gals/year, for the two dryers. ~~The maximum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MMCF per year.~~

9.8. Initial and annual <sup>PM and</sup> Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1988 version of 40 CFR 60, using EPA Methods, ~~5~~ <sup>Appendix A, Sand 9, respectively.</sup>

10.8. Compliance test reports shall be submitted to ~~DER~~ <sup>BESD</sup> within 45 days of test completion in accordance with ~~Chapter 17-2.700(7) of the F.A.C.~~ <sup>1991 Rule 17-297.570 of the F.A.C.</sup>

11.10. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-2.100, defining modification, shall be submitted for approval to ~~DER~~ <sup>DER's</sup> Bureau of Air Regulation (BAR).

DEP 2/2.200

PERMITTEE: *Loganathan*  
AES/Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

C. Requirements For the Permittees

CBCP

RESID

DEP

1. Beginning one month after certification, ~~AESCB~~ shall submit to ~~RESID~~ and ~~DER~~'s BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

<sup>CBCP</sup> 2. ~~The permittees~~ shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the ~~RESID~~ office. <sup>RESID</sup>

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees. <sup>CBCP: CBCP is subject to all applicable provisions of Rule 17-246.310(3), F.A.C., Unconfined Emissions of Particulate Matter.</sup>

4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da. <sup>CBCP</sup>

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed <sup>0.05</sup> ~~0.3~~ percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of ~~two~~ years to be available for ~~DER~~ and ~~RESID~~ inspection. <sup>DE</sup>

1.7 6. Coal fired in the CFBs shall have a sulfur content not to exceed ~~3.3~~ percent by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a. <sup>on a shipment (train load) basis. → three</sup>

<sup>CBCP</sup> 7. ~~AESCB~~ shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

<sup>CBCP</sup> 8. ~~The permittees~~ shall provide stack sampling facilities as required by Rule ~~17-2:700(4) FAC.~~ 17-297.345 F.A.C.

9. Prior to commercial operation of each source, the permittees shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

PERMITTEE: *Cosman*  
ABC Cedar Bay Inc.

Permit No. AC PSD-FL-137  
County: Duval

D. Contemporaneous Emission Reductions

*shall*  
~~This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that~~ *CRCP*  
The following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, \* upon completion of the initial compliance tests on the ~~AESCB~~ boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. *ESD* ~~(BESD)~~ shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

Issued this 28th day  
of March, 1992 3

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION  
PROTECTION

*Carol M. Browner*  
Carol M. Browner, Secretary

\* within 30 days of written confirmation by DEP of the successful

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent L. Fickett  
Cedar Bay Cogeneration, Inc.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

RE: Cedar Bay Cogeneration Project  
Revised Permit: PSD-FL-137A

Dear Mr. Fickett:

The U.S. EPA Region IV has completed its review of the summary of and the record in the proceeding to modify the certification for the Cedar Bay Cogeneration Project (Project) issued under Florida's Power Plant Siting Act, which were enclosures to Mr. C. H. Fancy's letter dated September 23, 1993; and, also reviewed was your request for administrative changes to the conditions of the air permit, No. PSD-FL-137, issued to Cedar Bay Cogeneration, Inc. -- the current name of AES/Cedar Bay, Inc., the original permittee for the Project -- on March 28, 1991, for the Project. You presented an array of changes to the original permit's (PSD-FL-137) Specific Conditions to account for the improvements in ambient air quality associated with the emission reductions now required by the Project's modified certification. The basis of your request for amendments/revisions are that -- based on changes in fuels, control technologies, operational parameters, and related equipment and procedures -- the Project will be required to and can achieve lower emission rates and that the Settlement Stipulation entered into by the parties to the modification proceeding commits the Project to requesting the proposed amended/revised permit, No. PSD-FL-137A.

Based on the foregoing, it is determined that the proposed revision (PSD-FL-137A) to permit No. PSD-FL-137 is acceptable and will not result in the increase of any pollutant emissions subject to the PSD regulations or of ambient impacts. As a result, the proposed revisions to the permit qualify as an administrative change and will not require additional public participation procedures.

Authority to construct a stationary source was granted for the Project, subject to the conditions contained in the permit to construct, No. PSD-FL-137, on March 28, 1991. The administrative change (PSD-FL-137A) does not alter the commence construction deadline for the Project. This authority to construct is based solely on the requirements of 40 CFR 52.21, the federal regulations governing significant deterioration of air quality, and in no way affects approvals under Federal or State regulatory authorities.

Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, may subject Cedar Bay Cogeneration, Inc. to enforcement action.

Any questions concerning this administrative permit revision may be directed to Mr. Winston A. Smith, Director, Air, Pesticides, and Toxics Management Division at (404) 347-3043.

Sincerely yours,

Patrick M. Tobin  
Acting Regional Administrator

Enclosures

cc: Mr. C. H. Fancy  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

PSD-FL-137A

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE  
PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. 7470 et seq., and the regulations promulgated thereunder at 40 C.F.R. 52.21, 40 CFR 24, and 40 CFR 51, Appendix S, as amended,

Cedar Bay Cogeneration, Inc.  
7500 Old Georgetown Road  
Bethesda, Maryland 20814

is hereby authorized to construct/modify a stationary source, specifically the Cedar Bay Cogeneration Project, at the following location:

Cedar Bay Cogeneration, Inc.  
Cedar Bay Cogeneration Project  
Duval County  
9640 Eastport Road  
Jacksonville, Florida

UTM Coordinates: Zone 17 - 441.76 km E, 3365.58 km N

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached General Conditions (Part I) and Specific Conditions (Part II).

The revisions to this permit shall become effective on the date signed below.

If construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

Date Signed

Patrick M. Tobin  
Acting Regional Administrator

**I. GENERAL CONDITIONS:**

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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any 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 of 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 acknowledgement 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 F.S. 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 any 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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. 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 F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration and Nonattainment Areas NSR
- (x) Compliance with New Source Performance Standards (NSPS; Subpart Da)

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 for 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.

## II. SPECIFIC CONDITIONS:

1. The construction and operation of Cedar Bay Cogeneration Project (CBCP or Project) shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions as indicated, which reflect the conditions of the Modification of Certification dated May 11, 1993:

### A. Emission Limitations for CBCP Boilers

#### 1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the SKC recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

d. The sulfur content of the coal shall not exceed 1.2% by weight on an annual basis. The sulfur content shall not exceed 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with No. 2 fuel oil with a maximum sulfur content of 0.05% by weight. The fuel oil shall normally only be used for startups. During commercial operation the maximum annual oil usage shall not exceed 1,900,000 gals./year. The maximum heat input from the fuel oil shall not exceed 380 MMBtu/hr. for each of the CFBs.

f. The CFBs shall be fueled only with the fuels permitted in Specific Conditions II.A.1.a., 1.b., and 1.e. above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of the DEP pursuant to Specific Condition II.E., Modification of Conditions.

g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed  $25.98 \times 10^6$  MMBtu/yr. total annual heat input.

h. To the extent that it is consistent with Specific Condition II.A.1.b. and the following, CBCP shall burn all of the short fiber rejects generated by SKC in processing recycled paper. No less than ninety (90) days prior to completion of construction, CBCP shall submit a plan to the DEP for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Specific Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify the DEP and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to the DEP and to the RESD within forty-five (45) days of completion of the test burn. The DEP shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this condition.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.

b. Baghouse, for control of particulate matter.

c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to

be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to the DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.

d. Selective Non-catalytic Reduction (SNCR) for control of NOx.

e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr.	TPY	TPY for 3 CFBs
CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758	2273
NOx	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--	--
	0.20 <sup>4</sup>	<--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> S <sub>04</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.01	0.04	0.11

[Note: TPY represents a 93% capacity factor.]

1 Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour applies.

2 Thirty-day rolling average.

3 Three-hour rolling average.

4 Twelve-Month rolling average.

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 minute average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Chapter 17-297, F.A.C., and listed in Specific Condition II.A.8. of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the

emission limitations in Specific Condition II.A.3. for CO, NOX and SO<sub>2</sub>, and with the opacity requirements in Specific Condition II.A.5., shall be determined with the Continuous Emission Monitoring Systems (CEMS) identified in Specific Condition II.A.9.

7. The CFBS are subject to 40 CFR Part 60, Subparts A and Da, except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOx, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist, shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e) and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NOx, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel.

e. The following test methods and procedures of Chapter 17-297, F.A.C., and 40 CFR Parts 60 and 61, or other DEP approved methods with prior DEP approval, in writing, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.

- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (14) Method 18 or 25 for VOCs.
- (15) Method 101A or EPA Method 29 for mercury.
- (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM10 emissions.
- (18) Ammonia (NH<sub>3</sub>) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C.; Chapter 17-297, F.A.C.; 40 CFR 60 Subpart A; 40 CFR 60 Subpart Da; 40 CFR 60 Appendix B; and, 40 CFR 60 Appendix F. These CEMS shall be used to determine compliance with the emission limitations in Specific Condition II.A.3. for CO, NO<sub>x</sub>, and SO<sub>2</sub>, and with the opacity requirements in Specific Condition II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by the DEP in writing and in accordance with state and federal regulations.

a. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown and malfunction.

b. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of all CEMS.

d. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Specific Condition II.A.11. herein, which exceeds the applicable emission limit in Specific Condition II.A.3.

f. The permittee is subject to all applicable provisions of Rule 17-4.130, F.A.C., Plant Operation-Problems.

#### 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production and flue gas temperature at the exit of the control equipment.

b. All coal and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

#### 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to the DEP's N.E. District office and to the RESD office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to the RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if



known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7)(e)).

d. Annual and quarterly reports shall be submitted to the RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to the DEP's Bureau of Air Regulation (BAR).

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

#### B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations, including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryers, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days; and, TPY is tons per year.

3. The VOC emissions, from the maximum No. 2 fuel oil utilization rate of 240 gals/hr. and 700,800 gals/year for the limestone dryers and 8000 gals/hr. and 1,900,000 gals/year for the three boilers, are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building	Bed Ash Bin
Coal Silo Conveyor	Fly Ash Bin
Limestone Pulverizer/Conveyor	Pellet Vibratory Screen
Limestone Storage Bin	Pelletizing Ash Recycle Tank
Bed Ash Hopper	Pelletizing Recycle Hopper
Bed Ash Silo	Cured Pellet Recycle Conveyor
Fly Ash Silo	Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading  
 Ash Pellet Hydrator  
 Ash Pellet Curing Silo  
 Ash Pelletizing Pan

The above listed sources are subject to a visible emission (VE) and

a particulate matter (PM) emission limitation requirement of 5% opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Chapter 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Specific Condition II.B.4., in accordance with Rule 17-296.711(2)(a), F.A.C. After the one-time PM mass verification compliance tests have been performed, neither the DEP nor the RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless the DEP or RESD, based on other information, has reason to believe the PM mass emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.

7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	lbs/hr.	Limitations	
		TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.24	0.32	0.64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO <sub>x</sub>	2.40	3.25	6.5
VOC	0.05	0.06	0.12

Visible emissions from the dryers shall not exceed 5% opacity.

8. The maximum sulfur content of No. 2 fuel oil shall not exceed 0.05% by weight. The maximum firing rate of No. 2 fuel oil for each limestone dryer shall not exceed 120 gals/hr., or 350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and 700,800 gals/year, for the two dryers.

9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1992 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

10. Compliance test reports shall be submitted to the RESD within 45 days of test completion in accordance with Rule 17-297.570, F.A.C.

11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to the DEP's BAR.

C. Requirements For the Permittees

1. Beginning one month after certification, CBCP shall submit to the RESD and the DEP's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days after receipt of the technical data.

2. CBCP shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the RESD office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by CBCP. CBCP is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any CFB unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.05% by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept at a minimum of three years to be available for the DEP and RESD inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed 1.7% by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. CBC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. CBCP shall provide stack sampling facilities as required by Rule 17-297.345, F.A.C.

9. Prior to commercial operation of each source, the permittee shall submit to the DEP's BAR a standardized plan or procedure 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.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

D. Contemporaneous Emission Reductions

The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation, and shall turn in their operation permits to the DEP's BAR, within 30 days of written confirmation by the DEP of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. The RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

E. Modification of Specific Conditions

The Specific Conditions of this permit may be modified in the following manner:

1. Through the May 11, 1993 Modification of Certification, the Board, which means the Governor and Cabinet, delegated to the Secretary of the DEP the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this permit.

2. All other modifications shall be made in accordance with Section 403.516, F.S.

### III. Attachments

1. Power Plant Site Certification package PA 88-24 and its associated attachments dated January 19, 1990.
2. Letter from EPA dated March 27, 1991.
3. DER's Final Determination dated March 28, 1991.
4. Letter from DOI dated December 24, 1992.
5. Settlement Stipulation dated April 13, 1993, in re: Power Plant Site Certification of Cedar Bay Cogeneration Project, PA-88-24(A), DOAH Case No. 88-5740, OGC Case No. 88-1089.
6. Final Order approving Modification of Certification dated May 11, 1993, in re: Power Plant Site Certification of Cedar Bay Cogeneration Project, PA-88-24A, DOAH Case No. 88-5740, OGC Case No. 88-1089.
7. DEP's Final Determination dated September 24, 1993.

**Cedar Bay Generating Company  
Limited Partnership**

September 14, 1993

**Via Certified Mail  
P 644 219 823**

Mr. Clair H. Fancy  
Florida Department of Environmental Protection  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

**RECEIVED**  
SEP 21 1993  
Division of Air  
Resources Management

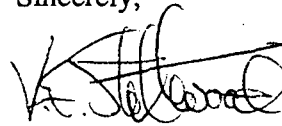
**Re: Notification of Anticipated Initial Startup of Fluidized Bed Boilers  
Cedar Bay Generating Company, L.P.**

Dear Mr. Fancy:

As required by 40 CFR § 60.7(a)(2), I am pleased to notify you that the anticipated initial startup date of the three fluidized bed coal fired boilers at the Cedar Bay Cogeneration Project is November 1, 1993. These three boilers are subject to 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.

We will provide all future federal and state notifications as required. If you have any questions, please contact Paul Reinermann at (301)718-6963 or Kevin Grant at (904)751-1007.

Sincerely,



J. Franklin Stallwood  
Project Manager

cc: Janine Kelly  
Paul Reinermann  
Kevin Grant  
Jim Burson, B&V  
Mike Perry, B&V

*mitchell*  
*...*  
*...*  
*...*

Department of Environmental Regulation  
**Routing and Transmittal Slip**

To: (Name, Office, Location)

- 1. *Bruce Mitchell*
- 2.
- 3.
- 4.

Remarks:

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SEP 21 1993  
Division of Air  
Resources Management

From	Date <i>9/20/93</i>
	Phone



Cedar Bay Generating Company  
Limited Partnership

September 14, 1993

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SEP 17 1993

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Via Certified Mail  
P 644 219 823

Mr. Clair H. Fancy  
Florida Department of Environmental Protection  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

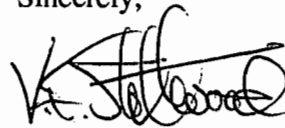
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Sincerely,



J. Franklin Stallwood  
Project Manager

cc: Janine Kelly  
Paul Reinermann  
Kevin Grant  
Jim Burson, B&V  
Mike Perry, B&V

*B. Mitchell*  
*B. Quinn*  
*R. Donelan, B&V*  
*Q. Call, WE Dept*



P.O. Box 26329 • 9640 Eastport Road • Jacksonville, FL 32226-6329 • 904-751-1007 • Fax: 904-751-1008

*R. Robinson*  
*Q. Bumpkin, A&S*  
*Q. Harper, EPA*  
An affiliate of U.S. Generating Company

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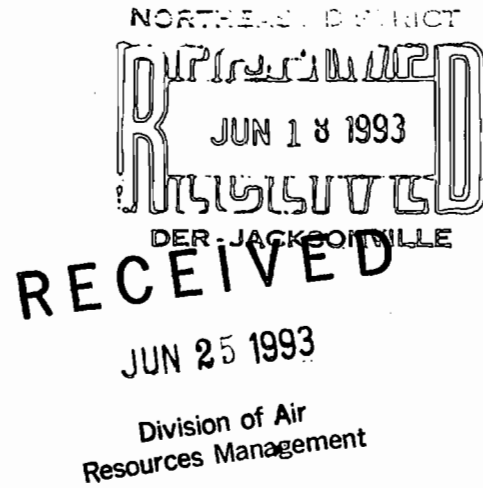
**Cedar Bay Generating Company,  
Limited Partnership**

June 11, 1993

**VIA CERTIFIED MAIL**  
**Receipt No. P 210 277 885**

Mr. Patrick Tobin  
Acting Regional Administrator  
United States Environmental Protection Agency  
Region IV  
345 Courtland Street, NE  
Atlanta, GA 30365

Re: Cedar Bay Cogeneration Project  
Duval County, Florida



Dear Mr. Tobin:

I am writing to update you regarding the air quality and other improvements recently ordered by the State of Florida for the Cedar Bay Cogeneration Project (the Project). This facility was originally certified pursuant to the Florida Power Plant Siting Act (PPSA) in February 1991 and permitted pursuant to the State of Florida's approved air program in March 1991. This letter is to inform EPA of certain modifications to the Project's Site Certification, such as reduced air emissions and air quality impacts.

In the summer of 1992, a proceeding was initiated to revise the State requirements for the Project. That proceeding recently culminated in a Settlement Stipulation, entered into by all of the parties (Attachment A to this letter) and approved by the Siting Board on May 11, 1993 (Attachment B to this letter). The Siting Board's Order calls for significant reductions to both the Project's air emissions and its air quality impacts. Moreover, in Paragraph 23 of the Settlement Stipulation, the Parties agreed that the Project's air permit should also be revised to reflect the agreed upon emission reductions and other improvements to ensure that they are federally enforceable. The Project is working with Florida's Department of Environmental Regulation (DER) to effectuate this requirement.

Effective August 7, 1992, EPA revoked DER's authority to implement the federal PSD program with respect to power plants subject to Florida's PPSA because of inconsistencies between the PPSA and EPA's PSD program.<sup>1/</sup> Until EPA returns permitting authority to Florida, EPA is responsible for final approval and issuance of PSD permits for facilities subject to the PPSA. As a result, under currently applicable procedures, DER would conduct the technical and administrative review for, and EPA would issue any revisions to, the air permit for the Project.

<sup>1/</sup> 55 Fed. Reg. 54, 931 (Nov. 23, 1992).



June 11, 1993

Page 2

In April 1993, after the Settlement Stipulation was signed, the Florida Legislature amended the PPSA in a way that should harmonize Florida's PPSA regulatory program with EPA's PSD guidelines. We understand that Florida plans to petition EPA for a return of its PSD authority in due course. However, given the uncertainty when the Settlement Stipulation was signed as to who would issue the revisions to the Project's air permit and when it would be revised, Paragraph 21 was included in the Settlement Stipulation. That Paragraph provides that "[w]ithin 30 days following final action by the Siting Board approving the modifications of the site certification," the project would alert EPA to the fact that the Project will be operated as though the applicable "provisions [of the new conditions of certification] were [already] incorporated into the existing air permit and accepts them as federally enforceable." (See Paragraphs 21 and 23.)

This letter is in satisfaction of the requirements set forth in Paragraphs 21 and 23 of the Settlement Stipulation. Thus, the Project hereby notifies EPA that the Project will be operated in compliance with the current provisions of the Conditions of Certification and of the Settlement Stipulation "as though they were incorporated into the air permit and accepts them as federally enforceable."

We look forward to working with EPA on these and other air quality matters as they may arise. If you have any questions, please do not hesitate to call Mark Carney at (301) 718-6899.

Sincerely,



Bernard E. Seals  
President and CEO

Attachments

cc: Parties of Record, w/o attachments  
Kent Fickett, w/o attachments  
Mark Carney, w/o attachments  
Clair Fancy, DER, w/o attachments

BES/ldbr



Department of Environmental Regulation  
**Routing and Transmittal Slip**

To: (Name, Office, Location)

1. *Clair/Fancy*

2.

3. *Broce*

4.

Remarks: *For file*

**RECEIVED**  
JUN 25 1993  
Division of Air  
Resources Management

From: *Air/Jax*

Date

Phone

BEFORE THE GOVERNOR AND CABINET  
STATE OF FLORIDA  
SITTING AS THE SITING BOARD

IN RE:  
POWER PLANT SITE CERTIFICATION  
OF CEDAR BAY COGENERATION  
PROJECT, PA-88-24

DOAH Case No. 88-5740  
OGC Case No. 88-1089

**FINAL ORDER APPROVING MODIFICATION OF CERTIFICATION**

On June 17, 1992, the Siting Board entered an Order Instituting Modification Proceedings with respect to the power plant site certification issued February 18, 1991, to AES Cedar Bay, Inc., and Seminole Kraft Corporation for the Cedar Bay Cogeneration Project in Jacksonville. The certification modification proceedings were docketed as DOAH Case No. 88-5740. On or about April 13, 1993, all parties to the modification proceedings before DOAH executed a Settlement Stipulation dated April 12, 1993, which resolved all disputed issues of fact and law among the parties. On April 14, 1993, a Joint Agreed Motion to Relinquish Jurisdiction based upon the Settlement Stipulation was filed by the Department on behalf of all parties. On April 28, 1993, the assigned DOAH Hearing Officer, Robert T. Benton II, entered an order relinquishing jurisdiction of the proceeding to the Board for the purpose of taking final agency action in the matter.

The Siting Board, having reviewed the terms of the Settlement Stipulation and otherwise having been fully advised as to this matter, concludes that the Stipulation effects an appropriate resolution of the controversy over the site certification for the

Cedar Bay Cogeneration Project. The Board believes that this resolution is consistent with the public interest and with the intent of the Board as expressed in its Order of June 17, 1992. The revised Conditions of Certification agreed to by all parties and attached as Appendix A implement the agreed modifications and improvements to the project and assure that construction and operation will comply with the non-procedural standards of the agencies of jurisdiction.

Accordingly, the Board ORDERS:

1. The certification for the Cedar Bay Cogeneration Project, PA 88-24, issued February 18, 1991, is MODIFIED. The Conditions of Certification contained in Appendix A shall henceforth apply to govern construction and operation of the Cedar Bay Cogeneration Project in accordance with Section 403.511, Florida Statutes (Supp. 1992).
2. The certification is further MODIFIED to reflect that the name of certificate holder AES Cedar Bay, Inc. has been changed to Cedar Bay Cogeneration, Inc.

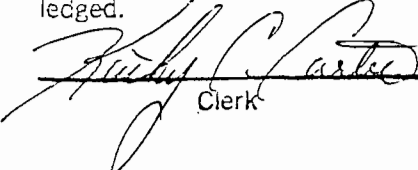
Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes (Supp. 1992) by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Regulation and Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied with the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days

from the date this Order is filed with the Clerk of the Department of Environmental Regulation.

DONE AND ORDERED this 11<sup>th</sup> day of May, 1993, in Tallahassee, Florida, pursuant to the vote of the Governor and Cabinet, sitting as the Siting Board, at the duly constituted Cabinet meeting on May 11, 1993.

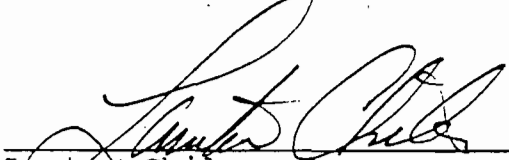
FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
Clerk

5-14-93  
Date

BY THE GOVERNOR AND CABINET,  
SITTING AS THE SITING BOARD

  
Lawton Chiles, Governor

CERTIFICATE OF SERVICE

I DO HEREBY CERTIFY that a true and correct copy of the foregoing document has been sent by U.S. Mail or by Hand Delivery to the following listed persons:

Gary Sams, Esq.  
Hopping Boyd Green & Sams  
P O Box 6526  
Tallahassee FL 32314

Gregory K. Radlinski, Esq.  
City of Jacksonville  
600 City Hall  
220 E Bay St  
Jacksonville FL 32202

Terry Cole, Esq.  
Scott Shirley, Esq.  
Oertel Hoffman Fernandez & Cole  
P O Box 6507  
Tallahassee FL 32314-6507

M.B. Adelson, IV  
Assistant General Counsel  
Douglas Bldg MS-35  
3900 Commonwealth Blvd  
Tallahassee FL 32399-3000

Jim Antista, General Counsel  
Florida Game & Fresh Water  
Fish Commission  
620 S Meridian Rd  
Tallahassee FL 32399-1600

Rob Vandiver, General Counsel  
Mike Palecki, Chief  
Bureau of Electric & Gas  
Florida Public Service Comms  
101 E Gaines St  
Tallahassee FL 32399-0850

Lucky Osho, Esq.  
Department of Community Affairs  
2740 Centerview Dr  
Tallahassee FL 32399-2100

James A. Heard, Esq.  
2902 Independent Sq  
Jacksonville FL 32202

Earl M. Barker, Esq.  
Slott & Barker  
334 East Duval St  
Jacksonville, FL 32302

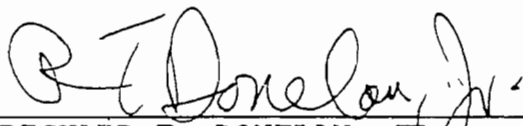
Lisa B. Cooper, Esq.  
Margol & Pennington  
76 Laura St  
Jacksonville FL 32202

Lawrence N. Curtin, Esq.  
Holland & Knight  
P O Drawer 810  
Tallahassee FL 32302

Nancy B. Barnard, Esq.  
St Johns River Water  
Management District  
P O Box 1429  
Palatka FL 32178-1429

this 13<sup>th</sup> day of May, 1993.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
RICHARD T. DONELAN, JR.  
Assistant General Counsel

Twin Towers Office Bldg  
2600 Blair Stone Rd  
Tallahassee FL 32399-2400  
Telephone: 904/488-9730



State of Florida Department of Environmental Protection  
CBCP/Seminole Kraft Corp.  
Cedar Bay Cogeneration Project  
PA 88-24A

(Revised 4/12/93)

**CONDITIONS OF CERTIFICATION**

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CEDAR BAY COGENERATION, INC./SEMINOLE KRAFT CORP.  
CEDAR BAY COGENERATION PROJECT  
PA 88-24A

CONDITIONS OF CERTIFICATION

When a condition is intended to refer to both Cedar Bay Cogeneration, Inc. (CBC) and Seminole Kraft Corp., the term "CBC/SK" or "permittees" will be used. When a condition is intended to refer to the "Cedar Bay Cogeneration Project" the terms "Cedar Bay Cogeneration Project", "CBCP", or "Project" will be used.

Where a condition applies only to Cedar Bay Cogeneration, Inc. the term "Cedar Bay Cogeneration, Inc." (CBC) or the term "permittee," where it is clear that "CBC" is the intended responsible party, will be used. Similarly, where a condition applies only to Seminole Kraft Corp., the term "Seminole Kraft Corp." or the abbreviation "SK" or the term "permittee," where it is clear that SK is the intended responsible party, will be used. The Department of Environmental Protection may be referred to as DEP or the Department. RESD represents the City of Jacksonville, Regulatory and Environmental Services Department. SJRWMD represents the St. Johns River Water Management District.

I. GENERAL

The construction and operation of CBCP shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters 17-210 through 17-297, 17-302, 17-4, 17-256 (Opening Burning), 17-601, 17-702, 17-312, 17-532, 17-550, 17-555, 17-25, 17-610, 17-660, and 17-772, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

II. AIR

The construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions of certification as indicated.

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. The maximum coal charging rate of each CFB shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the SK recycling process shall not exceed 210 yd<sup>3</sup>/day wet and 69,588 yd<sup>3</sup>/yr wet. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

d. The sulfur content of the coal shall not exceed 1.2% by weight on an annual basis. The sulfur content shall not exceed 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with No. 2 fuel oil with a maximum sulfur content of 0.05% by weight. The fuel oil shall normally only be used for startups. During commercial operation the maximum annual oil usage shall not exceed 1,900,000 gals./year. The maximum heat input from the fuel oil shall not exceed 380 MMBtu/hr. for each of the CFBs.

f. The CFBs shall be fueled only with the fuels permitted in Conditions II.A.1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DEP pursuant to condition XXI, Modification of Conditions.

g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed 25.98 x 10<sup>6</sup> MMBtu/yr total annual heat input.

h. To the extent that it is consistent with Condition II.A.1b. and the following, CBCP shall burn all of the short fiber rejects generated by Seminole Kraft in processing recycled paper. No less than ninety (90) days prior to completion of construction, CBCP shall submit a plan to DEP for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DEP and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DEP and to the RESD within forty-five (45) days of completion of the test burn. DEP shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this Condition of Certification.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.
- c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.
- d. Selective Non-catalytic Reduction (SNCR) for control of NOx.
- e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr.	TPY	TPY for 3 CFBs
CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758	2273
NOx	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--	--
	0.20 <sup>4</sup>	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> S <sub>04</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	<u>0.01</u>	<u>0.04</u>	0.11

[Note: TPY represents a 93% capacity factor.]

- (1) Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when 1-hour standard applies.
- (2) Thirty-day rolling average.
- (3) Three-hour rolling average.
- (4) Twelve-Month rolling average (MRA).

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub> and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMs) identified in Condition No. II.A.9.

7. The CFBS are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NO<sub>x</sub>, commencing no later than 12 months from the initial test.

c. Compliance tests shall be performed for mercury (Hg), beryllium (Be), and lead (Pb) until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in Condition II.A.3. above. Such tests shall occur, as necessary, in the first, fifth and tenth years and additional successive five year intervals following commercial operation of the Project.

d. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

e. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate for each permitted fuel.

f. The following test methods and procedures of Rule 17-297, F.A.C., and 40 CFR Parts 60 and 61 or other DEP approved methods with prior DEP approval, in writing, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.
- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (14) Method 18 or 25 for VOCs.
- (15) Method 101A or EPA Method 29 for mercury.
- (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM<sub>10</sub> emissions.
- (18) Ammonia (NH<sub>3</sub>) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. These CEMS shall be used to determine compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with



the opacity requirements in Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

a. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown and malfunction.

b. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

d. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. II.A.11 herein, which exceeds the applicable emission limit in Condition No. II.A.3.

f. The permittee is subject to all applicable provisions of Rule 17-4.130, Plant Operation-Problems.

#### 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

b. All coal and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

#### 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to DEP's N.E. District office and to the RESD office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., and 1,900,000 gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor
- Limestone Pulverizer/Conveyor
- Limestone Storage Bin
- Bed Ash Hopper
- Bed Ash Silo
- Fly Ash Silo
- Bed Ash Bin
- Fly Ash Bin
- Pellet Vibratory Screen
- Pelletizing Ash Recycle Tank
- Pelletizing Recycle Hopper
- Cured Pellet Recycle Conveyor
- Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the RESD office within 45 days after completion of the last test run.

c. The owner or operator shall submit excess emission reports to RESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(e)).

d. Annual and quarterly reports shall be submitted to RESD as per Rule 297.500, F.A.C.

12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

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B. CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., and 1,900,000 gals/year for the three boilers are not expected to be significant.

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

- Coal Crusher Building
- Coal Silo Conveyor
- Limestone Pulverizer/Conveyor
- Limestone Storage Bin
- Bed Ash Hopper
- Bed Ash Silo
- Fly Ash Silo
- Bed Ash Bin
- Fly Ash Bin
- Pellet Vibratory Screen
- Pelletizing Ash Recycle Tank
- Pelletizing Recycle Hopper
- Cured Pellet Recycle Conveyor
- Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each

source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

- Coal Car Unloading
- Ash Pellet Hydrator
- Ash Pellet Curing Silo
- Ash Pelletizing Pan

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.01 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Condition II. B.4., in accordance with Rule 17-296.711(2)(a), F.A.C. After the compliance tests have been performed, neither DEP nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DEP or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.

7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	lbs/hr.	Estimated Limitations	
		TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.24	0.32	0.64
SO <sub>2</sub>	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO <sub>x</sub>	2.40	3.25	6.5
VOC	0.05	0.06	0.12

Visible emissions from the dryers shall not exceed 5% opacity.

8. The maximum sulfur content of No. 2 fuel oil shall not exceed 0.05% by weight. The maximum firing rate of No. 2 fuel oil for each limestone dryer shall not exceed 120 gals/hr., or

350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and 700,800 gals/year, for the two dryers.

9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

10. Compliance test reports shall be submitted to RESD within 45 days of test completion in accordance with Rule 17-297.570 of the F.A.C.

11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DEP's Bureau of Air Regulation (BAR).

#### C. Requirements For the Permittees

1. Beginning one month after certification, CBCP shall submit to RESD and DEP's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

2. CBCP shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the RESD office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by CBCP. CBCP is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any CBCP unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.05 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of three years to be available for DEP and RESD inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. CBC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. CBCP shall provide stack sampling facilities as required by Rule 17-297.345 F.A.C.

9. Prior to commercial operation of each source, the permittee shall submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All CBCP records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

#### D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DEP of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. Within one year of surrender of operating permits as provided above, SK shall have completed the following steps to ensure compliance with this condition:

- Remove all oil guns
- Remove motors and selected conveyor parts in wood feed system for bark boilers
- Dismantle stacks
- Disconnect boiler feedwater pumps
- Sever fuel line connections
- Remove fan motors

These sources shall not, under any circumstances, be restarted, refurbished or re-permitted as new or existing sources, at the SK or CBCP site.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.



## E. SK Steam Boiler Emissions

1. This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, F.S., shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr of steam for use in its recycled paper process:

## Tons Per Year

CO	553
NO <sub>x</sub>	310
SO <sub>2</sub>	25, except as provided in (2) below

2. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein; and emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within Seminole Kraft's control. In no event shall the annual emissions of SO<sub>2</sub> from the steam boilers referenced above exceed a ceiling of 41 tons per year.

3. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SK, without supporting documents, in a newspaper of general circulation in Jacksonville, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by DEP until final disposition of any administrative proceedings.

### III. WATER DISCHARGES

Any discharges into any waters of the State during construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17-301, 17-302 and 17-660, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, CBCP shall comply with the following conditions of certification:

#### A. Plant Effluents and Receiving Body of Water

For discharges made from the CBCP power plant site the following conditions shall apply:

1. CBCP shall not discharge any cooling system, demineralizer regeneration, floor drainage or other process wastewaters from the operation of the CBCP facility into any waters of the State. CBCP shall install a closed-loop cooling water system in accordance with technical specifications set forth in the Zero Discharge System Plan submitted by CBCP to the Department.

2. Pursuant to the Zero Discharge Plan, CBCP shall make available to Seminole Kraft up to 500 gpm of reclaimed water that has been treated to a quality satisfactory for use in Seminole Kraft's cooling tower.

3. Receiving Body of Water - The receiving bodies of water for storm water discharges have been determined by the Department to be those waters of the St. John's River (during construction only) or the Broward River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes (F.S.).

4. Point of Discharge (POD) - The point of discharge has been determined by the Department to be where the storm water effluent physically enters the waters of the State in the St. John's River (during construction) via Outfall OSN 001 and Broward River (during construction and operation) via Outfall OSN 003 and OSN 008.

5. Chemical Wastes from CBCP - All low volume wastes (demineralizer regeneration, floor drainage, labs drains, and similar wastes) and chemical metal cleaning wastes shall be collected and treated in the the zero discharge treatment system or disposed of off-site.

6. Seminole Kraft Corporation (SKC) shall shut down the mill's once through cooling system within 10 days after written notification by DEP of the successful completion of the initial compliance tests on the CBCP boilers conducted pursuant to Condition II.A.7. SKC shall inform the DEP Northeast District Office of the shutdown and surrender all applicable operating permits for that facility within 21 days of such notification.

7. Storm Water Runoff

a. Construction - During construction there shall be no discharges from the stormwater basins for storms less than the ten-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in ten year, twenty-four hour storm shall meet the following limits and shall be monitored at OSNs 003 and 008 by a grab sample once per discharge, but not more often than once per week:

Effluent Characteristic	Discharge Limits
Flow (MGD)	Instantaneous Maximum
TSS (mg/l)	Report
pH	50
	6.0-9.0

All applicable discharge limitations, described in Part I of the NPDES permit (FL0041173) for stormwater discharges during the period of construction from this facility, shall apply under this permit and be reported to the Department as part of the Monthly Operation Report.

b. Operation

1. Yard Area Runoff - During normal plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods greater than the 22-year, 24-hour rainfall. During periods of operation when the CBCP is off-line, these necessary measures, as specified above, shall be used during rainfall periods greater than a 12-year, 24-hour storm. The discharge shall comply with all the monitoring requirements for Yard Area Runoff specified in Part I of NPDES Permit FL0041173 for this facility.

2. Storage Area Runoff - During operation there shall be no discharges from the stormwater basins for storms less than the fifty-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in 50 year, twenty-four hour storm shall meet the limits in 7.a. above and shall be monitored at OSN 008 by a grab sample once per discharge, but not more often than once per week. The discharge shall comply with all the monitoring requirements for the Coal, Limestone, and Ash Storage Area specified in Part I of NPDES Permit FL0041173 for this facility.

c. Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt, and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 in the discharge to the St. Johns River and 6.5 to 8.5 in the Broward River.

d. Special consideration must be given to the control of sediment laden runoff resulting from storm events during the construction phase. Best management practices erosion controls should be installed early during the construction period so as to prevent the transport of sediment into surface waters which could result in water quality violations and Departmental enforcement action. Revegetation and stabilization of disturbed areas should be accomplished as soon as possible to reduce the potential for further soil erosion. Should construction phase runoff pose a threat to the water quality of state waters, additional measures such as treatment of impounded runoff or by the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.

e. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17-25.027, F.A.C.

f. Correctional action or modification of the system will be necessary should mosquito problems occur.

g. CBC shall submit to DEP with copy to RESD and the SJRWMD, erosion control plans for the entire construction project (or discrete phases of the project) detailing measures to be taken to prevent the offsite discharge of turbid waters during construction. These plans must also be provided to the construction contractor prior to the initiation of construction.

h. All swale and retention basin side slopes shall be seeded and mulched or sodded within thirty days following their completion and a substantial vegetative cover must be established within ninety days of seeding.

8. Sanitary wastes from CBCP shall be collected and routed for treatment to the SKC domestic wastewater treatment plant.

#### B. Water Monitoring Programs

1. Necessity and extent of continuation of monitoring programs may be modified in accordance with Condition No. XXI, Modification of Conditions.

2. Chemical Stormwater Monitoring - The parameters described in Condition III.A. shall be monitored during discharge as described in condition III A. commencing with the start of construction or operation of the CFBS and reported quarterly to the Northeast District Office.

#### 3. Coal, Ash, and Limestone Storage Areas

a. Runoff from the coal pile, ash and lime stone storage areas shall be retained on-site during normal operations up to the 50-year, 24-hour storm event. Monitoring

of metals, such as iron, copper, zinc, mercury silver, and aluminum, shall be done once a month during any month when a discharge occurs at OSNs 003 or 008.

b. Stormwater from the storage area runoff pond shall be sampled the first time each month there is a discharge to the cooling tower pretreatment system under the operating conditions approved herein. Samples shall be taken for 12 separate months and analyses performed as specified in Condition 5 below.

4. The ground water levels shall be monitored continuously at selected wells as approved by the SJRWMD. Chemical analyses shall be made on samples from all monitored wells identified in Condition IV.F. and IV.G. below. The location, frequency and selected chemical analyses shall be as given in Condition IV.F and IV.G. The ground water monitoring program shall be implemented at least one year prior to commercial operation of the CFBs. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/analysis to the SJRWMD.

5. The reclaimed water transferred to Seminole Kraft for cooling tower make-up water shall be monitored for the following parameters:

Flow (gallons per minute)	Continuous/Flow Meter
pH (standard units)	Weekly/Meter or Grab
Iron (mg/L)	Monthly/Grab
Total Copper (ug/L)	Monthly/Grab
Zinc (mg/L)	Monthly/Grab
Mercury (ug/L)	Monthly/Grab
Silver (ug/L)	Monthly/Grab
Aluminum (mg/L)	Monthly/Grab
Cadmium (ug/L)	Monthly/Grab
Arsenic (ug/L)	Monthly/Grab
Antimony (mg/L)	Monthly/Grab

#### IV. GROUND WATER

##### A. Water Well Construction Permit

Prior to the construction, modification, or abandonment of a production well for the SK paper mill, Seminole Kraft must obtain a Water Well Construction Permit from the SJRWMD pursuant to Chapter 40C-3, F.A.C. Construction, modification, or abandonment of a production well will require modification of the SK consumptive use permit when such construction, modification or abandonment is other than that specified and described on SK's consumptive use permit application form. The construction, modification, or abandonment of a monitor well specified in Condition IV.H. will require the prior approval of the Department. All monitor wells intended for use over thirty days must be noticed to RESD prior to construction or change of status from temporary to permanent.

##### B. Well Criteria, Tagging and Wellfield Operating Plan

Leaking or inoperative well casings, valves, or controls must be repaired or replaced by SK as required to eliminate the leak or make the system fully operational. Failure to make such repairs will be cause for deeming the well abandoned in accordance with Chapter 17.21.02(5), F.A.C., Chapter 373.309, Florida Statutes and Chapter 366.301 (b), and .307 (a), Jacksonville ordinance Code. Wells deemed abandoned will require plugging according to state and local regulations.

A SJRWMD-issued identification tag must be prominently displayed by SK at each SK withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. The SK must notify the SJRWMD in the event that a replacement tag is needed.

SK must develop and implement a Wellfield Operating Program within six (6) months after construction of wells or start-up of the CBCP. This program must describe which wells are primary, secondary, and standby (reserve); the order of preference for using the wells; criteria for shutting down and restarting wells; describe CBCP and SKC responsibilities in the operation of the well field, and any other aspects of well field management operation, such as who the well field operator is and any other aspects of wellfield management operation. This program must be submitted to the SJRWMD and a copy to RESD within six (6) months of certification and receive SJRWMD approval before the wells may be used to supply water for the Cedar Bay Cogeneration plant.

### C. Maximum Annual Withdrawals

CBCP's maximum annual use from the Floridan aquifer may not exceed 530.7 million gallons. Maximum daily use from the Floridan aquifer for the CBCP may not exceed 1.45 million gallons. The use of potable water from the Floridan aquifer for cooling purposes is prohibited. The use of potable water from the Floridan aquifer for control of fugitive dust emissions is prohibited when alternative water sources are available, such as treated wastewater, shallow aquifer wells or stormwater. The use of Floridan aquifer potable water for the sole purpose of waste stream dilution is prohibited.

### D. Water Use Transfer

The SJRWMD must be notified, in writing, within 90 days of the transfer of this certification. All transfers are subject to the provisions of Section 40C-2.351, F.A.C., which state that all terms and conditions of the permit shall be binding of the transferee.

### E. Emergency Shortages

Nothing in this certification is to be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage, is declared by the District Governing Board, the CBCP shall adhere to water shortage restrictions as specified by SJRWMD to the extent the restrictions apply to all other similar users.

### F. Monitoring and Reporting

1.a. The permittee shall maintain records of total daily use by the CBCP on a monthly basis for each year ending on December 31st. These records shall be submitted to the SJRWMD on Form EN-3 by January 31st of each year.

b. Prior to beginning water usage, all points where water is delivered from the SKC water supply or wastewater system for use at CBCP must be equipped with totalizing flow meters. Such meters must maintain a 95% accuracy, be verifiable and be installed according to the manufacturer's specifications.

c. CBCP must maintain the required flow meter(s). In case of failure or breakdown of any meter or other flow measuring device, the SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

d. Total withdrawals from each monitored source must be recorded continuously, totalled monthly, and reported to the SJRWMD at least every six months from the initiation of the monitoring using SJRWMD Form No. EN-50.

e. CBCP must have all flow meters checked for accuracy once every 3 years within 30 days of the anniversary date of commencement of operation of the CBCP, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD Form No. EN-51 must be submitted to the SJRWMD within 10 days of meter inspection and calibration.

2. Water quality samples shall be taken by SK in May and October of each year from each SK production well. The samples shall be analyzed by a DEP certified laboratory for the following parameters:

Magnesium	Sulfate
Sodium	Carbonate
Potassium	Bi-Carbonate (or alkalinity if pH is 6.9 or lower)
Chloride	Calcium

All major ion analyses shall be checked for anion/cation balance and must balance within 5 percent prior to submission. It is recommended that duplicates be taken to allow for laboratory problems or loss. The sample analyses shall be submitted to the SJRWMD by May 30 and October 30 of each year.

3. Legal uses of water existing at the time of certification application may not be significantly adversely impacted by the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.

4. Off-site land uses existing at the time of certification application may not be significantly adversely impacted as a result of the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to revocation or modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.

5. During the seventh year following issuance of this certification order, CBCP shall submit a report to SJRWMD, DEP, and RESD demonstrating compliance with these conditions of certification, Chapter 373, Florida Statutes, and the Rules of SJRWMD and DEP, applicable to the consumptive use of water. Compliance shall be demonstrated with rules and statutory provisions in effect at that time.



SJRWMD shall evaluate the report and notify DEP in a report of any issues regarding compliance with this certification and applicable rules and statutory provisions, including whether the consumptive use of water for the CBCP complies with those provisions of Chapter 272, Florida Statutes, and DEP's and SJRWMD's rules applicable to its consumptive use and whether any conditions of certification must be amended, added or deleted in order to insure that the referenced rules and statutory provisions are complied with. SJRWMD shall respond within 30 days of receipt of CBCP's report as to whether or not it contains information sufficient to make a determination as to compliance with the referenced rules and statutory provisions. Thereafter, DEP shall notify CBCP and RESD within ninety (90) days after DEP's determination that CBCP's report is sufficient. Section 40C-1.610, F.A.C., shall apply. An opportunity for hearing pursuant to Section 120.57, Florida Statutes, shall be afforded any party. In any hearing requested pursuant to this condition of certification, the burden of demonstrating compliance shall be on CBCP. The continued consumptive use of water for the CBCP shall be dependent upon CBCP demonstrating and presenting sufficient data to establish that its consumptive use meets the referenced rules or statutory provisions. The Board hereby delegates to the Secretary the authority to enter final orders regarding this condition in the event an administrative hearing is requested.

#### G. Ground Water Monitoring Requirements

After consultation with the DEP, RESD, and SJRWMD, CBCP shall install a monitoring well network to monitor ground water quality horizontally and vertically through the aquifer above the Hawthorn Formation. Ground water quantity and flow directions will be determined seasonally at the site through the preparation of seasonal water table contour maps, based upon water level data obtained during the applicant's preoperational monitoring program. From these maps and the results of the detailed subsurface investigation of site stratigraphy, the water quality monitoring well network will be located. A ground water monitoring plan that meets the requirements of Section 17-522.600(3), F.A.C., shall be submitted to the Department's Northeast District Office for review. Approval or disapproval of the ground water monitoring plan shall be given within 60 days of receipt. Ground water monitoring shall be required at CBCP's pelletized ash storage area, each sedimentation pond, and each coal pile storage area, and SK's new lime mud storage area. Insofar as possible, the monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program, provided that the wells construction will not preclude their use. Existing wells will be properly sealed in accordance with Chapter 17-532, F.A.C., whenever they are abandoned due to construction of facilities. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water

equal to at least three casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. No sampling or analysis is to be initiated until receipt of written approval of a site-specific quality assurance project plan (QAPP by the Department. Results shall be submitted to the RESD and the DEP NE District by the fifteenth (15th) day of the month following the month during which such analyses were performed prior to commercial operation, or by the 30th day of the month following the calendar quarter such analyses were performed after start of commercial operation. Testing for the following constituents is required around unlined ponds or storage areas:

TDS	Cadmium
Conductance	Zinc
pH	Copper
Redox	Nickel
Sulfate	Selenium
Sulfite	Chromium
Color	Arsenic
Chloride	Beryllium
Iron	Mercury
Aluminum	Lead
	Gross Alpha

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

- H. Leachate
  - 1. Zone of Discharge

Leachate from CBCP's coal storage piles, SK's lime mud storage area or CBCP's sedimentation ponds shall not cause or contribute to contamination of waters of the State (including both surface and ground waters) in excess of the limitations of Chapter 17-302, and 17-520, F.A.C., beyond the boundary of a zone of discharge extending to the top of the Hawthorn Formation below the waste landfill cell or pond rising to a depth of 50 feet at a horizontal distance of 200 feet from the edge of the storage pile, landfill or ponds, or rising to the boundary of the site, as appropriate.

## 2. Corrective Action

When the ground water monitoring system shows a potential for this facility to cause or contribute to a violation of the ground water quality standards of Chapter 17-520, F.A.C., at the boundary of the zone of discharge, the appropriate ponds or coal pile shall be bottom sealed, relocated, or the operation of the affected facility shall be altered in such a manner as to assure the Department that no violation of the ground water standards will occur beyond the boundary of the zone of discharge.

### I. Water Use Audit

At the end of the second year of production withdrawals, CBCP must have conducted an audit of the amount of water used in the various operational processes, landscaping practices and domestic facilities. If the audit results indicate losses of water due to leakage, a leak detection analysis must be conducted and submitted to the SJRWMD and a leak repair program must be implemented.

### J. Water Conservation Awareness Program

Prior to beginning water usage, CBCP must implement and submit to the SJRWMD an employee awareness program (including such measures as posting signs regarding water conservation and reporting leaks) concerning water conservation.

V. CONTROL MEASURES DURING CONSTRUCTION

A. Storm Water Runoff

During construction, appropriate measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the total suspended solids to 50 mg/l or less and pH to 6.0 to 9.0 at OSN 003 during rainfall events that are lesser in intensity than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 29 NTU above background in waters of the State.

Control measures shall consist at the minimum of sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 at OSN.003. Stormwater drainage to the Broward River shall be monitored as indicated below:

Monitoring Point	Parameters	Frequency	Sample Type
*Storm water drainage to the Broward River from the runoff treatment pond	BOD5, TOC, suspended solids, turbidity, dissolved oxygen, pH, TKN, Total phosphorus, Fecal Coliform, Total Coliform	**	**
	Oil and grease	**	**

\*Monitoring shall be conducted at suitable points for allowing a comparison of the characteristics of preconstruction and construction phase drainage and receiving waters.

\*\*The frequency and sample type shall be as outlined in a sampling program prepared by the applicant and submitted at least ninety days prior to start of construction for review and approval by the DEP Northeast District Office. The District Office will furnish copies of the sampling program to the RESD and SJRWMD and shall indicate approval or disapproval within 60 days of submittal.

B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and the RESD.

C. Environmental Control Program

CBCP shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental

practices and the applicable conditions of certification. A written plan for controlling pollution during construction shall be submitted to DEP and RESD within sixty days of issuance of the Certification. The plan shall identify and describe all pollutants and waste generated during construction and the methods for control, treatment and disposal. CBCP shall notify the Department's Northeast District Office and RESD by telephone within 24 hours if possible if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to the Department, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

**D. Construction Dewatering Effluent**

There shall be no discharge of construction dewatering effluent.

**VI. SAFETY**

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety Section of the Florida Department of Commerce will also be complied with.

**VII. SCREENING**

The CBCP shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

**VIII. TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS**

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XI, Noncompliance Notification.

**IX. SOLID WASTE STORAGE AND DISPOSAL**

CBCP shall be responsible for arranging for the proper storage, handling, disposal, or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the CBCP facility shall be removed from site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash will be pelletized, or made into aggregate form, and either

shipped back to the mine utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by companies specializing in the marketing and utilization of combustion by-products. The bottom ash and fly ash shall not be disposed of in a landfill within Duval County. If the CBCP decides to dispose of the bottom ash or fly ash by other than returning it to the mine, they shall notify RESD and DEP. Prior to removal and disposal of spent lime mud and pond tailings, the CBCP shall determine whether those wastes are hazardous under 40 CFR 26 and 17-730, F.A.C. If wastes are determined to be hazardous, they shall be disposed of in accordance with Chapter 17-730, F.A.C., after consultation with the DEP and RESD. If not hazardous, disposal shall be to a landfill designed to ensure compliance with groundwater quality criteria as contained in Chapters 17-3, and 17-730 F.A.C. All solid wastes disposed of on site shall comply with the provisions of Chapter 17-701, F.A.C. Ground water monitoring in accordance with 17-4, and 17-520, F.A.C. shall be implemented at the lime mud disposal site.

At least ninety (90) days prior to disposal or use of any sludge generated by pretreatment of reclaimed Seminole Kraft wastewater or zero wastewater discharge system, CBCP shall report to DEP and RESD concerning the chemical characterization of any such sludge. DEP reserves the right to require additional sampling and analysis as necessary to ensure that the above-cited regulations are complied with. Prior to any such sludge disposal, CBCP shall obtain a letter of acceptance from a permitted disposal site. On or before the last day of the first year of commercial operation, and each year of commercial operation thereafter, CBCP shall report to DEP and RESD concerning the composition and quantity of sludge generated by the zero water discharge system and the method of disposal, including name and location of facilities handling, treating, storing, and/or disposing of said sludge waste.

#### **X. CHANGE IN DISCHARGE**

All discharges or emissions authorized herein to CBCP shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of this certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of new or supplemental application to DEP's Siting Coordination Office pursuant to Chapter 403, F.S.

**XI. NONCOMPLIANCE NOTIFICATION**

If, for any reason, either permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the DEP's Northeast District Office and RESD office by telephone as soon as possible but not later than the first DEP working day after the permittee becomes aware of said noncompliance, and shall confirm the reported situation in writing within seventy-two (72) hours supplying the following information:

A. A description and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying event.

**XII. FACILITIES OPERATION**

Each permittee shall at all times maintain in good working order and operate as efficiently as possible all of its treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department (Northeast District) approval and after notice to RESD except where otherwise authorized by applicable regulations.

**XIII. ADVERSE IMPACT**

Each permittee shall take all reasonable steps to minimize any adverse impact resulting from its noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

**XIV. RIGHT OF ENTRY**

The permittees shall allow the Secretary of the Florida Department of Environmental Protection and/or authorized DEP representatives, and representatives of the RESD and SJRWMD, upon the presentation of credentials:

A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

B. To have access to and copy all records required to be kept under the conditions of this certification; and

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or emissions pollutants; and

D. To assess any damage to the environment or violation of ambient standards.

E. SJRWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related CBCP facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

F. RESD authorized staff, upon proper identification, will have permission to enter, inspect, sample any discharge, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

#### XV. REVOCATION OR SUSPENSION

This certification may be suspended, or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

#### XVI. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve either permittee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification, applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve either permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

#### XVII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor 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. The permittees shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

#### XVIII. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.



**XVIV. DEFINITIONS**

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

**XX. REVIEW OF SITE CERTIFICATION**

A. The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination Control Act Amendments of 1972 for the plant units, the Department shall review all monitoring data that has been submitted to it or it's agent(s) during the preceding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification of the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittees. Such review will be repeated at least every five years thereafter.

**XXI. MODIFICATION OF CONDITIONS**

The conditions of this certification may be modified in the following manner:

A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this certification.

B. All other modifications shall be made in accordance with Section 403.516, Florida Statutes.

**XXII. FLOOD CONTROL PROTECTION**

The plant and associated facilities shall be constructed in such a manner as to comply with the Duval County flood protection requirements.

**XXIII. EFFECT OF CERTIFICATION**

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application. Thus, conformance to those criteria, unless specifically amended, modified, or as the Department and parties are otherwise notified, is binding upon the applicants in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

**XXIV. NOISE**

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, each permittee shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise. The permittees shall comply with the applicable noise limitations specified in Environmental Protection Board Rules or The City of Jacksonville Noise Ordinance.

**XXV. USE OF WATER FOR COOLING PURPOSES**

The CBCP shall use reclaimed wastewater from the Seminole Kraft paper mill (in addition to any wastewater generated by the CBCP that is suitable for reuse for that purpose) for cooling water supply. In the event of disruption of SKC reclaimed wastewater as the cooling water makeup source for Cedar Bay, Inc., Cedar Bay, Inc. will utilize the water retained in SKC's holding basins or other non-potable sources of water as cooling water makeup.

At least 90 days prior to beginning commercial operation, Cedar Bay Cogeneration, Inc. shall submit to the Department a report concerning the actual measured pollutant characteristics of reclaimed water to be obtained from the Seminole Kraft paper mill. Such report shall be based on approved analytical results from four monthly samples obtained directly from the Seminole Kraft waste stream to be tied in with the CBCP cooling system, and shall include the concentrations of BOD5, COD, total organic carbon, total suspended solids, ammonia, pH, oil and grease, calcium, magnesium, sodium, potassium, alkalinity as mg of CaCO<sub>3</sub>, sulfate, chloride, nitrate, fluoride, silica, chlorine, phosphate (total) as P, cyanide, iron, manganese, aluminum, nickel, zinc, copper, cadmium, chromium, beryllium, arsenic, selenium, antimony, mercury, barium, silver, lead, thallium, phosphorus, and TKN. Where applicable, wastewater sampling and analyses conducted by SKC under the terms of operation permit number I016-200147 may be used to meet the terms of this condition. Any other sampling and analyses submitted under the terms of this permit shall be in accordance with a Department-approved Quality Assurance Plan. Results of all testing and sampling specified above shall be submitted to the Department within 30 days of testing.

Seminole Kraft's generation, treatment, or discharge of its wastewater is not covered by this site certification, and the permitting of Seminole Kraft's generation, treatment, or discharge of its wastewater does not require Siting Board approval.

#### **XXVI. ENFORCEMENT**

A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.

B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

C. RESD may initiate any and all lawful actions to enforce the conditions of this certification that are based on the Department's rules, after obtaining the Secretary's written permission to so process on behalf of the Department.

#### **XXVII. ENDANGERED AND THREATENED SPECIES**

Prior to start of construction, CBCP shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

#### **XXVIII. ENVIRONMENTALLY SENSITIVE LAND ACQUISITION**

##### **a. Periodic Payments**

1. As a condition of this certification, CBCP shall be required to make periodic monetary contributions for the purpose of funding a program for the acquisition and management of environmentally sensitive lands in Duval County, Florida. These payments shall be made to The Nature Conservancy, Inc., in trust for the State of Florida, to be used as provided in Section B below; and to the City of Jacksonville Environmental Land Acquisition Trust Fund, to be used as provided in Section C below.

2. The two million dollar payment made by or on behalf of the AES Corporation to The Nature Conservancy, Inc., (TNC) on or about June 16, 1992, shall be deemed to be the first of two periodic payments, totaling 4.5 million dollars, which the CBCP is obligated to make to TNC under this condition. The second periodic payment, 2.5 million dollars, shall be transmitted within 48 hours of the date on

which the CBCP commences commercial operation. TNC shall hold all funds received from CBCP or on behalf of CBCP in trust for the State of Florida.

3. Commencing on the anniversary of the second payment required by subsection (2) above, and continuing each year for 30 years thereafter, a payment of \$300,000 shall be submitted to the City of Jacksonville for each year that the CBCP remains in commercial operation. Each annual payment shall be transmitted within 48 hours of the anniversary of the date on which commercial operation commenced at CBCP, and shall be deposited in the Jacksonville Environmental Land Acquisition Trust Fund (JELATF) established by § 110.362 of the Jacksonville Ordinance Code.

4. Any failure to achieve timely transmission of a periodic payment required by this condition shall be grounds for revocation of the certification.

5. All funds attributable to the periodic payments required by this condition shall be received, held, disbursed, and expended in conformance with the applicable provisions of this Condition.

6. The express intent of this Condition is to assure that these periodic payments fund the acquisition of lands possessing substantial ecological value to the ecosystem of the St. Johns River watershed; and that lands acquired with funds provided under this condition be managed to retain or enhance the ecological values for which they were acquired. Funds made available under this Condition shall not be used for the development of urban recreational facilities which conflict with the natural resource values of a site. Prohibited facilities include ball fields or courts, playgrounds, and other developed amenities which are not dependent on ecological conditions for their existence and which are not ancillary to public access for recreational enjoyment of the available natural resources.

7. Properly managed natural resource-based recreation which does not degrade the ecological values of a site shall be encouraged through the development of appropriate management plans which shall be approved by the Department for any tract purchased under this Condition. Management of any site shall be consistent with the acquisition criteria specified in this Condition and shall be coordinated with other managers of natural lands in the region, such as the Department, the St. Johns River Water Management District, the National Park Service, the Division of Forestry, and the Florida Game and Fresh Water Fish Commission.

8. Funds made available under this Condition may be used to participate in existing public and private environmental land acquisition programs such as the Conservation and Recreational Lands Program (CARL), Save Our Rivers (SOR), Florida Communities Trust (FCT), Land

Acquisition Trust Fund (LATF), Preservation 2000, The Nature Conservancy, and other similar programs consistent with the intent behind this condition.

b. Land Acquisition Process: State of Florida

1. All land acquisition and management activities funded by the certification for the use and benefit of the State of Florida or its designee shall be undertaken in accordance with the process established by this Section.

2. The Nature Conservancy (TNC) shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this condition. The Department and TNC shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. There shall be a six member Land Acquisition and Management Advisory Council (LAMAC) comprising two representatives appointed by each of the following governmental entities: the Department, the St. Johns River Water Management District, and the City of Jacksonville. TNC shall appoint a representative to serve as chair of the LAMAC. The LAMAC shall hold one or more public hearings for the purpose of receiving public input as to lands potentially suitable for acquisition under this Section. Following appropriate public input, the LAMAC shall report its findings to the Department.

4. After review of the LAMAC report, TNC shall identify and list as many land acquisition options as it deems practicable. A copy of the list shall be submitted to each of the entities represented on the LAMAC. In establishing this list, TNC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

The LAMAC shall review and approve the land acquisition options list before any parcels are acquired under this condition.

5. Following approval of the list, TNC shall initiate selection of parcels to be acquired. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Secretary of the Department of a proposed acquisition, the parcel shall be purchased by TNC in trust for the State of Florida.

6. Title to any parcel purchased under this condition shall ultimately vest in a governmental entity following a determination by the Secretary of the Department, after consultation with the LAMAC, as to how the property can be managed most appropriately in the public interest. It is understood that title to a newly-purchased parcel may initially vest in TNC pending this determination and transfer of the title to an appropriate government entity or entities for management. The Siting Board hereby delegates to the Secretary of the Department the authority to select the governmental entity or entities most suitable to hold title and manage any property purchased under this condition. Upon notification from the Department that the selection has occurred, TNC shall forthwith execute a transfer of title to the designated entity or entities.

7. TNC shall be entitled to receive reimbursement from funds held by it under this Condition for any costs related to the performance of an acquisition under this Section. TNC may expend on an annual basis up to two per cent of the purchase price of a parcel to which it holds interim title to defray expenses associated with management of that parcel until title can be transferred as specified in subsection (6).

8. TNC is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments required under this condition to be capitalized for immediate utilization in land acquisition or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting TNC to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

c. Land Acquisition Process: City of Jacksonville

1. All land acquisition and management activities funded by Section A.3 of this Condition for the use and benefit of the City of Jacksonville or its designee shall be undertaken in accordance with the process established by this Section.

2. The Real Estate Division of the City of Jacksonville Public Works Department or another appropriate governmental entity shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this Condition. The Department and the City of Jacksonville shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. The City of Jacksonville, acting through the Jacksonville Environmental Land Selection Committee (JELSC) established by Mayoral Executive Order 85-81, as amended by Executive Order 91-147, pursuant to § 110.362 of the Jacksonville Ordinance Code, shall identify and list as many land acquisition options as it deems practicable. In establishing its list, JELSC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

d. the goals, objectives, and policies of the Conservation/Coastal Management element of the City's Comprehensive Plan, as amended.

A copy of the JELSC list, as it may be amended from time to time, shall be supplied to the Department and to the St. Johns River Water Management District. JELSC shall furnish a copy of the list upon its initial preparation and after any subsequent amendment thereto.

4. Lands to be acquired under this Section with funds made available in whole or in part under this Condition may be acquired only with the concurrence of the Jacksonville City Council and the Department. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Department and the City Council of a proposed acquisition, the parcel shall be purchased by the City.

5. With the approval of the Department and the City Council, title to land acquired under this Section may be sold or transferred to a governmental entity to facilitate effective and beneficial management of the parcel. Any funds received by the City as a result of sale or transfer of property previously acquired under this Section shall be deposited in the JELATF and remain subject to the provisions of this Condition.

6. Any funds paid by CBCP to the JELATF in fulfillment of this Condition or in accordance with any other Condition of Certification may be used for the purpose of managing lands acquired under this Section.

7. The City of Jacksonville is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments available under this Section to be capitalized for immediate utilization in land acquisition and management or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting the City to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

8. Sale or transfer of any parcel acquired under this Section shall be subject to a reversionary interest retained by the Board of Trustees of the Internal Improvement Trust Fund. In the event that the property ever ceases to be used and managed for environmental purposes consistent with this Condition, ownership of the property shall immediately revert to the State of Florida.

#### **XXIX. TRANSFER OF CERTIFICATION**

If the Cedar Bay Cogeneration Project is sold or legally transferred to another owner, notice of such sale or transfer shall immediately be submitted to the Florida Department of Environmental Protection and the agency parties to this certification by the previous certification holder (permittee) and the assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.



STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC., and  
SEMINOLE KRAFT CORPORATION,  
  
Petitioners,

vs.

DOAH CASE NO. 88-5740

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION,  
  
Respondent,

and

CITY OF JACKSONVILLE,  
DEPARTMENT OF COMMUNITY AFFAIRS,  
PUBLIC SERVICE COMMISSION, ST.  
JOHNS RIVER WATER MANAGEMENT  
DISTRICT, JACKSONVILLE ELECTRIC  
AUTHORITY, CHARLES W. BOSTWICK,  
WILLIAM C. BOSTWICK, BARNETT  
BANKS TRUST COMPANY, N.A., IMESON  
INTERNATIONAL PARK, INC., and  
INDUSTRIAL PARK DEVELOPMENT  
CORPORATION, CITIZENS COMMITTEE,  
INC., SIERRA CLUB, FLORIDA  
AUDUBON SOCIETY, THE DUVAL  
AUDUBON SOCIETY, INC., and  
STAFFORD CAMPBELL,

Intervenors.

SETTLEMENT STIPULATION

The parties in this and related proceedings, Cedar Bay Cogeneration, Inc. ("CBC") (formerly known as AES Cedar Bay, Inc.), Seminole Kraft Corporation ("SK"), the Florida Department of Environmental Regulation ("DER"), St. Johns River Water Management District ("SJRWMD"), City of Jacksonville, the Citizens' Committee, Inc. (including all of its members, who are listed on Attachment A

hereto), William C. Bostwick, Sierra Club, Florida Audubon Society, The Duval Audubon Society, Inc., and Stafford Campbell, as indicated below by their signatures or the signatures of their counsel or representatives (collectively "the Parties"), enter into the following settlement stipulation and agreement (Agreement), which shall be binding on themselves and their members, principals, successors and assigns. Persons signing on behalf of a group, organization, or legal entity represent that they have all necessary power and authority to execute this agreement and to bind said group, organization, or legal entity and its members.

#### A. Purposes

1. The intent of this Agreement is to resolve fully and finally, and with prejudice, all disputes, issues or other matters arising in the above-styled proceeding and in all related permitting proceedings or appeals at the federal, state, regional and local levels arising out of, or related to, the certification of, the petition for modification of certification of, or the permitting of, the Cedar Bay Cogeneration Project ("CBCP" or "Project") and its construction and operation in a manner binding on the parties to this Agreement. This Agreement resolves all issues which were raised or could have been raised in this proceeding or any other proceeding, including but not limited to the issue of use of natural gas in the Project or the Project's satisfaction of federal, state, regional and local environmental or other regulations. The parties will not seek administrative or judicial review, or seek revocation of, any certification or permit

for the Project which is consistent with the terms of this Agreement. This Agreement neither waives nor expands the rights available to any Party under existing law to seek enforcement or any other remedy for violation of this Agreement, the conditions of certification, or any state or federal permit for facts occurring after the date of this Agreement.

2. Each Party hereby requests, intending to be bound by its individual execution of this Agreement, that the Florida Power Plant Siting Board (Siting Board) enter a Final Order Approving Modification of Site Certification that contains the Conditions of Certification attached hereto as Attachment B and the provisions of this Agreement contained in Paragraphs 3 through 6 inclusive. All other provisions of this Agreement which are not included in the modified certification or other related permit shall be independently binding on the parties hereto. Furthermore, the parties agree that the findings implicit and explicit in this document establish that, if operated in compliance with the certification and applicable permits, the CBCP as now proposed plus the package boilers now proposed by SKC fully satisfy the Florida Electrical Power Plant Siting Act, all applicable federal, state, regional and local environmental requirements, and the Siting Board's Order Initiating Modification Proceedings, dated June 17, 1992, and are associated with, "[o]n balance," fewer "environmental impacts" than are associated with the SKC recycling operation without the CBCP as now proposed.

**B. Conditions of Certification**

3. A revised Condition of Certification No. XXVIII shall be included in the Conditions of Certification as contained in Attachment C hereto.

4. An additional condition of certification No. II.A.8.c. shall be included in the Conditions of Certification, as follows:

Compliance tests shall be performed for mercury (Hg), beryllium (Be), and lead (Pb) until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in Condition II.A.3. above. Such tests shall occur, as necessary, in the first, fifth and tenth years and additional successive five year intervals following commercial operation of the Project.

5. Revised Conditions of Certification No. II.A.6 and II.A.9. to address the use of Continuous Emissions Monitors for determining compliance with emissions limits for sulfur dioxide, nitrogen oxides, carbon monoxide and opacity shall be included in the Conditions of Certification, as follows:

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with the opacity requirements in Condition No. II.A.5 shall be determined with the Continuous Emission Monitoring Systems (CEMs) identified in Condition No. II.A.9.

9. CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. These CEMs shall be used to determine compliance with the emission limitations in Condition No. II.A.3 for CO, NO<sub>x</sub>, and SO<sub>2</sub> and with the opacity

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requirements in Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

6. Revised Conditions of Certification II.D. and II.E. to address Seminole Kraft Corporation's annual emissions from its new package boilers and actions to dismantle or render inoperable SK's existing power and bark boilers following surrender of the air permits for those boilers shall be included in the Conditions of Certification as follows:

D. Contemporaneous Emission Reductions.

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under section 403.509, F.S., shall require that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. Within one year of surrender of operating permits as provided above, SK shall have completed the following steps to ensure compliance with this condition:

Remove all oil guns;

Remove motors and selected conveyor parts in wood feed system for bark boilers;

Dismantle stacks;

Disconnect boiler feedwater pumps;

Sever fuel line connections; and

Remove fan motors.

These sources shall not, under any circumstances, be restarted, refurbished or re-permitted as new or existing sources, at the SK or CBCP site.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

**E. SK Steam Boiler Emissions**

1. This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, Florida Statutes, shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr. of steam for use in its recycled paper process:

	Tons Per Year
CO	553
NO <sub>x</sub>	310
SO <sub>2</sub>	25, except as provided in E.2 below.

2. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein; and emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within Seminole Kraft's control. In no event shall the annual emissions of SO<sub>2</sub> from the steam boilers referenced above exceed a ceiling of 41 tons per year.

3. The notice shall include a statement of reasons for the request and supporting documentation, and shall be published by SK, without supporting documents, in a newspaper of general circulation in Jacksonville as defined in section 403.5115(2), Florida Statutes. The filing and publication of the notice no later than 7 days following the date of exceedance shall preclude any finding of violation by DER until final disposition of any administrative proceedings.

**C. Other Environmental Provisions**

7. As an incentive to achieve lower sulfur dioxide emissions than permitted under the Conditions of Certification, CBC shall pay

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annually to the City of Jacksonville, Land Acquisition Trust Fund, \$400 for each ton of sulfur dioxide emitted in excess of 2208 tons per calendar year from the CBCP's three circulating fluidized bed boilers, combined, up to the total annual permitted sulfur dioxide emissions for the Project; provided, however, that any taxes, charges or fees payable under an applicable regulatory program on account of emissions above 2208 tons per year but below the maximum permitted annual emissions shall be deducted from the \$400 per ton payable under this provision. The annual sulfur dioxide emissions from the CBCP's CFB boilers for purposes of this provision shall be determined based on continuous emissions monitoring data for the calendar year. The amount of any such payments due for a calendar year shall be determined by March 1st of the following year and be paid to the City of Jacksonville, Land Acquisition Trust Fund, by May 1st. Any annual emissions of sulfur dioxide above 2208 TPY but below the maximum permitted annual emissions shall not constitute a violation of the Conditions of Certification or of this Agreement.

8. As an incentive to achieve lower nitrogen oxide emissions than permitted under the Conditions of Certification, CBC shall pay annually to the City of Jacksonville, Land Acquisition Trust Fund, \$200 for each ton of nitrogen oxides emitted in excess of 1948 tons per calendar year from the CBCP's three circulating fluidized bed boilers, combined, up to the total annual permitted nitrogen oxide emissions for the Project; provided, however, that any taxes, charges or fees payable under an applicable regulatory program on

account of emissions above 1948 tons per year but below the maximum permitted annual emissions shall be deducted from the \$200 per ton payable under this provision. The annual nitrogen oxide emissions from the CBCP's CFB boilers for purposes of this provision shall be determined based on continuous emissions monitoring data for the calendar year. The amount of any such payments due for a calendar year shall be determined by March 1st of the following year and be paid to the City of Jacksonville, Land Acquisition Trust Fund, by May 1st. Any annual emissions of nitrogen oxides above 1948 TPY but below the maximum permitted annual emissions shall not constitute a violation of the Conditions of Certification or of this Agreement.

9. CBC agrees to donate to the City of Jacksonville the sum of \$575,000 within 30 days after commencement of commercial operation. Of this sum, \$350,000 shall be earmarked for construction of a new fire station east of the rail line in the vicinity of the intersection of Main St. and Busch Dr. to improve response times for emergency vehicles to reach the residential areas near the Project site. The other \$225,000 shall be earmarked for the purchase of one (1) mobile air quality monitoring van, for use by the City of Jacksonville Department of Regulatory and Environmental Services to monitor ambient air for concentrations of non-criteria pollutants. The City of Jacksonville shall use its best efforts to acquire such an air quality monitoring van for a purchase price less than \$225,000. If the City is successful in



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acquiring such a van for less than \$225,000, the remaining funds shall be applied toward the construction of the new fire station.

10. CBC agrees to provide onsite and offsite improvements to mitigate impacts across the Broward River from noise and light created by the Project. Such improvements shall be done in accordance with the landscape plan for the Project as approved by the City of Jacksonville on April 2, 1993. During the first three years of commercial operation, CBC, after consultation with the Citizens' Committee, Inc., will provide further mitigation for noise and light impacts by providing additional onsite or offsite improvements including improvements to the CBCP, which are intended to reduce such impacts; however, no such further improvements and related services, including consulting fees, shall exceed a total cost of \$120,000. Any such improvements to the Project shall not occur if such mitigation would cause any adverse impacts to, including filling of, wetlands; require adverse modifications of the stormwater management system or ponds; or cause a violation of the conditions of certification, applicable law or the City of Jacksonville's landscape ordinance.

11. The Project shall be constructed in conformance with the conceptual Site Plan attached hereto as Attachment D. This site plan represents the facilities that are currently to be constructed and operated pursuant to the Site Certification, as modified pursuant to these proceedings and this Agreement, and the locations of those facilities. Any future modifications to this Site Plan shall be made in accordance with applicable law and regulations.

12. The parties agree that CBC will not be required to pursue a federal National Pollutant Discharge Elimination System (NPDES) or other permit for a surface water discharge permit for any Phase II water treatment system as referenced in the Siting Board's Order Instituting Modification Proceedings, dated June 17, 1992. No such Phase II water treatment system is proposed and any prior proposal has been withdrawn in favor of the CBCP's zero discharge system.

13. The parties hereto agree not to oppose the issuance of any NPDES permit for the Project for the discharge of storm water or runoff caused by extreme rainfall events from the yard area and storage area runoff ponds as shown on Attachment D, provided that the proposed discharge is consistent with the data previously submitted on or about April 4, 1993 to DER, SJRWMD, and the City of Jacksonville in support of the Petition for Modification of Certification. For purposes of this agreement, an extreme rainfall event is defined as 1) a 50 year/24 hour storm for runoff from the storage area; 2) a 22 year/24 hour storm for runoff from the yard area when the CBCP turbine generator is operating; or 3) a 12 year/24 hour storm for runoff from the yard area when the CBCP turbine generator is not operating.

14. The parties agree that there is no basis to require the preparation or completion of an environmental impact statement (EIS) for the Project and that the parties will not request that such an EIS be completed or prepared.

15. Any proposal to plant trees as an offset of carbon dioxide emissions from the Project, as proposed by a previous owner

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of the stock of CBC, is satisfied by the improvements made pursuant to the modified conditions of certification and this Agreement.

16. Seminole Kraft stipulates that the issuance of the original certification for the CBCP consumed all creditable emissions resulting from the shutdown of Seminole Kraft's existing bark and power boilers. Any creditable emissions resulting from the shutdown of the kraft recovery boilers, lime kilns, smelt dissolving tanks and slaker No. 3 shall be determined as provided in Rule 17-212.400(a), F.A.C. and any permit issued for SK's three proposed package boilers; but SK acknowledges that no creditable emissions remain for sulfur dioxide.

17. The Project and the Seminole Kraft recycling mill are independent sources of air emissions. Accordingly, neither shall be entitled to receive further air emission credits or offsets based upon the operating performance of the other below its air emission limits established in the attached Conditions of Certification or any air permit nor shall there be enforcement taken against one of these parties for violations of legal requirements by the other of these two parties.

**D. Other Provisions**

18. With respect to the first public announcement of this settlement agreement, the timing and wording of the first release of this Agreement will be reserved to the City of Jacksonville, the Sierra Club, Audubon Societies, Stafford Campbell and the Citizens' Committee, after consultation on such timing and wording with representatives of CBC and Seminole Kraft. Nothing released is to

be derogatory of any party to this Agreement, nor inconsistent with the terms of this Agreement. Subsequent releases may be made by any party to this Agreement at its option, but in all instances shall be consistent with the terms of this Agreement.

19. The Parties agree to cooperate in obtaining final action by the Siting Board on the proposed modification as expeditiously as possible. The Parties agree that any presentation which they may make to the Hearing Officer and the Siting Board shall be consistent with the terms, provisions and spirit of this Agreement and with the modified conditions of certification. The parties further agree to consult with one another in advance of the meeting of the Siting Board concerning any presentation they may make to the Board.

20. The Citizens' Committee Inc., Sierra Club, Florida Audubon Society, Duval Audubon Society, and Stafford Campbell agree to return no later than April 30, 1993 to counsel for CBC and SK, respectively, all copies of all documents which are subject to any confidentiality agreement in this case.

21. Within 30 days following final action by the Siting Board approving the modifications of site certification, CBC will state in writing to the United States Environmental Protection Agency that it will operate the Project in compliance with Section II of the Conditions of Certification attached hereto and Paragraph 5 of this Agreement as though those provisions were incorporated into the existing air permit for the Project and accepts them as

federally enforceable. CBC will contemporaneously provide a copy of this letter to the other Parties to this Agreement.

22. As an element of this Agreement, CBC has provided the Certificate attached as Attachment E.

23. All Parties waive any right to appeal, to challenge or to take other judicial or administrative action to oppose, in any forum available, the issuance of a final revised air permit for the Project which contains permit conditions that are substantially equivalent to the Conditions of Certification contained in Section II of the conditions of certification in Attachment B hereto and the additional provisions of Paragraph 5 herein. The Parties reserve and do not waive the right to challenge or otherwise oppose any final revised air permit for the Project that contains conditions substantially different from those addressed by section II of the conditions of certification and Paragraph 5 of this Agreement.

24. This agreement may be executed in multiple counterparts.

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WHEREFORE, the parties hereto signify their ratification of this Settlement Stipulation by affixing their signatures hereto:

Stafford Campbell

[Signature]  
Date: 4/19/93

Sierra Club, Florida Audubon Society, The Duval Audubon Society, Inc.

By: James A. Heard  
James Heard, Attorney  
Date: 4/13/93

Citizens' Committee, Inc.

By: Barbara Broward  
Barbara Broward, President  
Date: 4/13/93

Cedar Bay Cogeneration, Inc.

By: [Signature]  
Gary P. Sams, Attorney  
Date: 4/12/93

Florida Department of Environmental Regulation

By: Richard T. Donelan  
Richard T. Donelan  
Assistant General Counsel  
Date: 12 April 93

City of Jacksonville

By: [Signature]  
ED AUSTIN  
Its: Mayor  
Date: April 14, 1993

St. Johns River Water Management District

By: Nancy B. Barnard  
Assistant General Counsel  
Its: Assistant General Counsel  
Date: 15 April 93

Seminole Kraft Corporation


By: [Signature]  
Scott Shirley, Attorney  
Date: 4/12/93

Charles W. Bostwick

[Signature]  
Date: 13 April 1993

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The Estate of William C.  
Bostwick and Barnett Banks  
Trust Company, N.A.

By:   
Charles W. Bostwick

Date: 12<sup>th</sup> April 1993

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SETTLEMENT STIPULATION

ATTACHMENT A

ALL MEMBERS OF CITIZENS' COMMITTEE



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ATTACHMENT A

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC. and SEMINOLE  
KRAFT CORPORATION,

Petitioners.

vs.

DEPARTMENT OF ENVIRONMENTAL  
REGULATION,

Respondent,

and

CITY OF JACKSONVILLE, DEPARTMENT OF  
COMMUNITY AFFAIRS, PUBLIC SERVICE  
COMMISSION, ST. JOHNS RIVER WATER  
MANAGEMENT DISTRICT, JACKSONVILLE  
ELECTRIC AUTHORITY, CHARLES W.  
BOSTWICK, WILLIAM C. BOSTWICK,  
BARNETT BANKS TRUST COMPANY, N.A.,  
IMESON INTERNATIONAL PARK, INC.,  
INDUSTRIAL PARK DEVELOPMENT  
CORPORATION, CITIZENS COMMITTEE,  
INC., SIERRA CLUB, FLORIDA AUDUBON  
SOCIETY, THE DUVAL AUDUBON SOCIETY,  
INC. and STAFFORD CAMPBELL,

CASE NO. 88-5740

Intervenors.

**AFFIDAVIT OF LISA BARCLAY COOPER**

Before me, the undersigned authority, personally appeared Lisa Barclay Cooper, who,  
being first duly sworn, deposes and says:

1. I am counsel of record for intervenor The Citizens' Committee, Inc., in the above-  
styled action. Following is a true and complete list of the members of The Citizens' Committee,  
Inc.:

1. Barbara Broward, President
2. Jack B. Lee, Vice President
3. Charles. L. Daniels, Vice President
4. William C. Val Bostwick, Jr., Secretary
5. Dorothy D. Mathias, Treasurer

FURTHER, THE AFFIANT SAYETH NOT.

*Lisa Barclay Cooper*  
 LISA BARCLAY COOPER

Sworn to and subscribed before me  
this 12th day of April, 1993.

*Margaret A. Z. Stanley*  
 Signature of Notary Public

Margaret A. Z. Stanley  
 Name of Notary (Typed, Printed or Stamped)

Commission Number (if not legible on seal):

My Commission Expires (if not legible on seal):

NOTARY PUBLIC, STATE OF FLORIDA  
 My commission expires Aug. 30, 1993  
 Bonded thru Patterson - Becht Agency

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**SETTLEMENT STIPULATION**

**ATTACHMENT B**

**CONDITIONS OF CERTIFICATION  
APRIL 7, 1993**

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 09-Apr-1993 02:01pm EST  
**From:** Sue Sullivan TAL  
SULLIVAN S  
**Dept:** Office of Secretary  
**Tel No:** 904/487-0472  
**SUNCOM:**

**TO:** Clair Fancy TAL  
**TO:** Bruce Mitchell TAL

( FANCY\_C )  
( MITCHELL\_B )

**Subject:** Cedar Bay SK conditions

Richard Donelan has gotten a tentative agreement with Seminole Kraft to accept this condition. Richard wants us to wait until he has the final sign off before we change the Conditions of Certification or the SK Permit.

Buck

#### D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DEP of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. RESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. Within one year of surrender of operating permits as provided above, SK shall take the following steps to ensure compliance with this condition:

Remove all oil guns  
Remove motors and selected conveyor parts in wood feed system for bark boilers  
Dismantle stacks  
Remove boiler feedwater pumps  
Sever fuel line connections  
Remove fan motors

These sources shall not, under any circumstances, be restarted, refurbished or re-permitted as new or existing sources, at the SK or CBCP site.

This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

#### E. SK Steam Boiler Emissions

This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, Florida Statutes, shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hor of steam for use in its recycled paper process:

##### Tons Per Year

CO 553  
NO<sub>x</sub> 310  
SO<sub>2</sub> 25, except as provided below

In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein, and

emissions of SO<sub>2</sub> during the period of force majeure curtailment shall not be counted against the yearly emissions ceiling of 25 tons, except that in no event shall the annual emissions of SO<sub>2</sub> from the steam boilers referenced above exceed a ceiling of 41 tons per year. The notice shall include a statement or reasons for the request and supporting documentation. The filing of the notice at least 30 days prior to the date of exceedance, shall preclude any finding of violation for such exceedance by DEP until final disposition of any administrative proceedings thereon.

# TELECOPY COVER SHEET FOR MULTIPLE RECIPIENTS

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2000 Pennsylvania Avenue, N.W.

Washington, DC 20006

Telecopy Number: (202)778-2201

Name: Richard Donelan

Tel: 904/488-9730

FAX NO.: 904/488-2439

Name: Greg Radlinski

Tel: 904/630-1300

FAX NO.: 904/630-1316

Name: Lisa Cooper

Tel: 904/355-7508

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Name: Gary Sams

Tel: 904/222-7500

FAX NO.: 904/224-8551

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Special Instructions:

Insert A

In addition, compliance with the emission limitations in Condition No. 3 for CO, NOX, and SO2 and with the opacity requirements in Condition No. 5 shall be determined with the Continuous Emission Monitoring Systems (CEMS) ~~identified in Condition No. 3.~~

Insert B

*In accordance with the Federal regulations,*

✓ These CEMS shall be used to determine compliance with the emission limitations ~~in Condition No. 3~~ for CO, NOX, and SO2 and with the opacity requirements, ~~in Condition No. 5.~~

Operator: \_\_\_\_\_

Date: April 9, 1993

Time: \_\_\_\_\_ a.m./p.m.

Client/Matter Name: USGen

Client/Matter No.: 44429.000002

This communication is confidential and is intended to be privileged pursuant to the attorney-client privilege and the work-product doctrine.

If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone, and return the original message to us at the above address via the U.S. Postal Service.

- (15) Method 201A or EPA Method 20 for mercury.
- (16) Method 204 for beryllium.
- (17) Method 201 or 201A for PM10 emissions.
- (18) Ammonia (NH3) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

~~CSCP shall use Continuous Emission Monitoring Systems (CEMS) to determine compliance in accordance with 40 CFR 60.466. and shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, pursuant to all applicable requirements of Rule 17-296.800, P.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. The~~ permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DEP in writing and in accordance with state and federal regulations.

a. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown and malfunction.

b. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

d. Opacity monitoring system data shall be reduced to 5-minute averages, based on 35 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

e. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 10 11 herein, which exceeds the applicable emission limit in Condition No. 3.



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3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr.	TPY	TPY for 3 CFBs
CO	0.1751	1861	758	2273
NOx	0.172	180.72	736.1	2208
SO <sub>2</sub>	0.243	255.13	--	--
	0.204		866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> SO <sub>4</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.01	0.04	0.11

[Note: TPY represents a 93% capacity factor.]

- 1 Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour standard applies.
- 2 Thirty-day rolling average.
- 3 Three-hour rolling average.
- 4 Twelve-Month rolling average (MRA).

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, P.A.C., and listed in Condition No. 7 of this permit or by equivalent methods after prior written DEP approval.

7. The CFBs are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOx, CO, VOC, lead, fluorides, ammonia, mercury,

Best Available Copy

C. Fancy  
Rec'd 4/6

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APR 2 1993

Dept. of Environmental Reg.  
Office of General Counsel



RESOURCE  
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GROUP  
INC.

Route 5 South  
P.O. Box 1499  
Norwich, Vermont 05055

Tel 802/649-1999  
Fax 802/649-5371

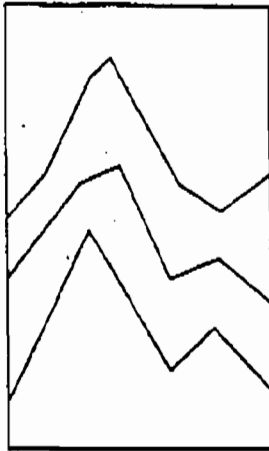
MEMORANDUM

To: Michael Teague  
Gary Sams  
Gary Weidinger  
Mark Carney  
Kent Fickett  
Joe Curren  
Steve Jelinek

From: Colin High  
Subject: Cedar Bay Cogeneration Project Air Quality Analysis Review.  
Date: April 1st 1993

Enclosed please find a copy of the draft "Cedar Bay Cogeneration Project Air Quality Analysis Review" prepared by Resource Systems Group Inc.  
ate:

Post-It™ brand fax transmittal memo 7571		# of pages	41	
To	Angela Morrison		From	Joe Curren
Co.	HBGES		Co.	ENSR
Dept.			Phone #	
Fax #			Fax #	



**DRAFT**

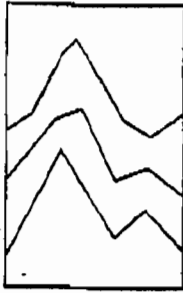
**Cedar Bay Cogeneration Project Air  
Quality Analysis Review**

**RESOURCE  
SYSTEMS  
GROUP  
INC.**

**Norwich, Vermont**

**Prepared for:**

**City of Jacksonville, The Sierra Club,  
Duval Audubon Society, the Florida  
Audubon Society, and Stafford  
Campbell  
April 1993**



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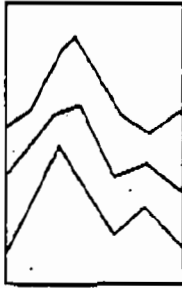
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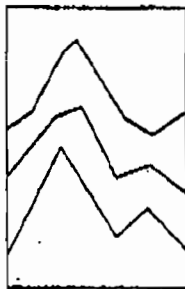
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## A) INTRODUCTION

The purpose of this report is to review and evaluate the air quality analysis undertaken for the modification proceedings regarding the Cedar Bay Cogeneration Project (CBCP). This report primarily reviews the analysis presented in the "Cedar Bay Cogeneration Project Air Quality Analysis" prepared by ENSR Consulting and Engineering in February, 1993 (ENSR Report) and reports on analyses undertaken by Resources Systems Group (RSG) to supplement that work. The ENSR report addresses the air quality impacts of the CBCP as proposed to be modified in the context of the Siting Board's Order Instituting Modification Proceeding of June 16, 1992 (Siting Board Order).

This report is based on our review of the ENSR report as well as earlier reports, correspondence between the parties, depositions of witnesses for parties, the application of Seminole Kraft Corporation (SKC) for a permit for the construction of three package boilers to supplement the steam purchased from CBCP, data, computer files and modeling runs provided by ENSR, data provided by SKC, U.S. Generating, the Florida Department of Environmental Regulation, the U.S. EPA, private companies, and our own air quality modeling runs.

The main focus of this review and analysis is to address the issues which the Siting Board's Order required the CBCP and SKC to address, namely:

"that for the proposed modification to be approved AES and SKC will have the burden of proving that:

On balance the environmental impacts of the AES power plant, as modified, and the addition of any boilers on the SKC site necessary to provide the 640,000 lbs of steam per hour for SKC's use, as called for by the original certification, will be less than the impacts of the SKC recycling operation without the power plant, etc."<sup>1</sup>

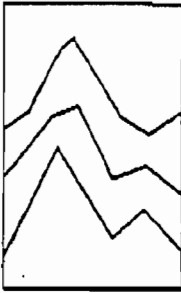
Also, the analyses reported here were conducted to determine if the "proposed modifications are both technically feasible and consistent with the non-procedural standards of the agencies", to the extent that they meet the requirements of Florida and federal air quality regulations<sup>2</sup>.

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<sup>1</sup>Siting Board Order June 16th 1992 page 2

<sup>2</sup>Siting Board Order June 16th 1992 page 5

the "test"



## CEDAR BAY COGENERATION PROJECT AIR QUALITY REVIEW, April 1, 1993

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The report is therefore organized in two parts which address the following issues: first, a comparison of emissions from each source; and second, the compliance of the CBCP with all applicable State and federal standards.

## B) COMPARISON OF CBCP PLUS SKC PACKAGE BOILERS WITH SKC RECYCLING

The Siting Board Order required the CBCP to compare the environmental impacts of the CBCP as proposed to be modified with the SKC boilers that will be closed if the CBCP operates. The terms of that comparison are given in the order, and the ENSR report has put forward the specific emissions and operating parameters on which they believe the comparison should be made. This section of our report reviews and, where necessary, modifies ENSR's emissions and operating parameters, to respond more accurately to the Siting Board's Order for a comparison.

The parameters which specify the operation of the CBCP and the three package boilers to be constructed by SKC are based on the ENSR report, in the application of SKC for a PSD permit<sup>1</sup>, in the revised conditions of certification proposed by DER<sup>2</sup>, and depositions testimony of a DER official, Mr. Clair Fancy. We understand that the DER has proposed to limit the SKC package boilers to burn natural gas as the primary fuel. Fuel oil may not be combusted for more than 400 hours per year, and the sulfur content of the oil burned at SKC must be limited to 0.05%. Also, the CBCP limestone dryers would also be restricted to 0.05% sulfur in their fuel oil.

The CBCP, with the conditions described above, will be compared to the expected emissions and impacts of two bark boilers and three oil-fired power boilers at the existing SKC recycling operation, used as required to provide the steam for SKC without the CBCP.

### B.1) EMISSIONS AND OPERATING PARAMETERS OF CBCP

For criteria pollutants, review of operating parameters is, for the most part, unnecessary since the applicant will be legally bound by their permit which will be based on the proposal. For the review of unregulated hazardous emissions, where the applicant will not be legally bound, it is appropriate to

<sup>1</sup> "PSD Permit Application for New Package Boilers; Seminole Kraft Corporation; Jacksonville, Florida," KBN Corp, November 1992.

<sup>2</sup> "State of Florida Department of Environmental Regulation Review of Proposed Modification of Certified Electric Power Plant Site for Cedar Bay Cogeneration Project; Case No. PA 88-24A," Florida Department of Environmental Regulation, March 25, 1993.

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review these rates. Both criteria pollutants and toxic air pollutants are discussed below.

**B.1.1) CRITERIA POLLUTANTS**

The emissions of criteria pollutants for the CBCP seem reasonable given the emission factors published in the ENSR report. In our analysis the only major difference in emission estimates is for SO<sub>2</sub> from the limestone dryers and package boilers. Based on the recently published DER recommended conditions of certification and Mr. Fancy's deposition testimony, the limestone dryers and package boilers will run on 0.05% sulfur oil rather than the previously proposed 0.3% sulfur oil (annual average). Furthermore, the limestone dryers will be limited to operating no more than 14 hours per day, and the package boilers will only be allowed to use oil for 400 hours per year. These changes will result in maximum emissions of SO<sub>2</sub> being significantly reduced for the two sources. The resulting SO<sub>2</sub> emissions on an annual basis will be:

Table 1: SO<sub>2</sub> Emissions Based on New Permit Conditions

Source	SO <sub>2</sub> Emissions from March ENSR Report	Proposed Permit Limitation	Difference
Limestone Dryers	43.0	2.3	-41.7
Package Boilers	449.1	4	-445.1

**B.1.2) TOXIC EMISSION RATES**

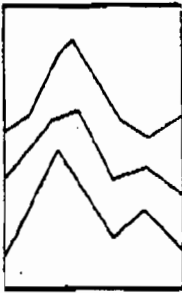
ENSR relied primarily on the EPA manual on air toxics from coal and oil combustion sources<sup>1</sup> for data on toxics content in coal. However, rather than rely on actual emission rates of other plants, they estimated emission rates based the estimated concentration of each toxic pollutant in the coal, and assuming a percentage that would actually go up the stack for each pollutant.

The toxic emission factors used by the applicant were changed markedly from the previous application, in their efforts to assure that the risks are not overstated. The most significant change was that rather than using the mean concentration of the metals in the coal plus three standard deviations, their revised emission rates use the mean plus only one standard deviation. This

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<sup>1</sup> Estimating Air Toxics From Coal and Oil Combustion Sources, U.S. EPA OAQPS EPA-450/2-89-001





## CEDAR BAY COGENERATION PROJECT AIR QUALITY REVIEW, April 1, 1993

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reduces their confidence in the resultant emission rate calculation from 99.7% to 68.2%.

There were also a number of assumptions made about the removal efficiency of trace metals that contradict other statements in the ENSR report and test results from other similar facilities. In the case of mercury, Arshad Nawaz from Bechtel, in his October 23, 1992 letter, indicated that mercury removal efficiencies ranged from 40 to 70% in similar facilities, and that they would use 50% to be conservative. However, using a number closer to the middle of the range (55%) than to the lower end of the range (40%) is not particularly conservative. Moreover, in the final emission rate calculations, a removal efficiency of 60% was used. This is actually an optimistic assumption, rather than a conservative assumption, given the range of typical removal efficiencies of 40% to 70%.

In the case of hexavalent chromium, a removal efficiency of 98% was assumed in ENSR's emission rates. However, in test results from the AES Thames CFB facility, noted by the applicant as being similar to CBCP, only a 68% removal efficiency of chromium was measured. This results in a sixteen-fold underestimation of hexavalent chromium emissions, which is a very potent carcinogen. A similar discrepancy exists for nickel, for which a removal efficiency of 98% was assumed, but only 62% removal was attained in the AES Thames CFB.

Using the lower removal efficiencies for chromium and nickel, and the operating parameters of the SKC package boilers, the modified hazardous air emission rates for the CBCP Case 3 are presented in Table A-II in Appendix II.

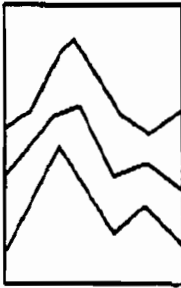
## B.2) EMISSIONS AND OPERATING PARAMETERS OF SKC

In the ENSR report, the CBCP emissions are to be compared with those from SKC recycling operation. In this type of comparative analysis, it is important that the emissions from SKC are not over-estimated, as this would tend to under-estimate the changes in emissions due to the construction of the CBCP. Rather, realistic assumptions about the projected SKC operation should be used.

### B.2.1) OPERATING PARAMETERS OF SKC RECYCLING

To determine what emissions from the SKC recycling facility may be expected when SKC's five existing boilers are operating to provide power to SKC recycling without CBCP, we made an analysis of the historical operating parameters of the facility. Based on depositions taken of SKC witnesses, it has become apparent that the operations of the bark and power boilers have not and will not significantly change as a result of the change-over to a 100%

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recycling facility. Significant operating parameters include the hours of operation, the amount of steam generated by each boiler, and the fuel used in the boilers. We performed an analysis of the fuel use at SKC based on operating reports submitted to the City of Jacksonville for the years 1978, and 1980 through 1991. We have also obtained 1992 and January 1993 data, but we understand that of these data, SKC only considers December 1992 and January 1993 to be typical of SKC's operation, given the change-over to recycling in the remaining parts of 1992.

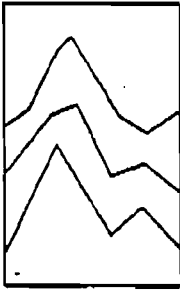
Our first analysis considered the use of fuel at the five boilers in SKC's operating history. Figure 1 illustrates the steam use at SKC from 1980 to 1991. As is shown, average steam generation by the bark and power boilers peaked in 1981 at 640,000 lb/hr (average). Between 1988 and 1991, annual average steam use was 526,000 lb/hr and never exceeded 555,755 lb/hr. Approximately 37% of this steam load was provided by the bark boilers. Depositions of SKC witnesses, Messrs. Stanley and Riddle, indicate that this more recent steam load is typical of the recycling operation, and that on the peak day, the steam load should not exceed 640,000 lb/hr. This peak steam loading is the loading used by ENSR in both long term and short term forecasts of SKC emissions.

SKC runs two types of boilers: bark boilers, which burn oil, bark, and recycling rejects; and power boilers, which burn oil. The emissions from each of these fuels are generally quite different, making the accurate estimation of total emissions highly dependent on the actual use of each boiler type.

In their estimation of SKC recycling emissions, ENSR used different operational capacity parameters for each pollutant, with the result that in any one situation, tended to overpredict the amount of pollution generated from SKC. For example, ENSR's SO<sub>2</sub> emission calculation assumed that the power boilers were used at 100% capacity over the entire year, since the power boilers have higher SO<sub>2</sub> emissions per BTU than the bark boilers. For TSP, ENSR assumed a capacity factor of 100% for the bark boilers, since TSP emissions are worse from the bark boilers. These two assumptions are inconsistent, and apparently were made to purposefully over-estimate SKC emissions. Our investigations of an historical SKC operations have shown that neither of ENSR's assumptions are representative of actual operations. Over the last four years (1988 to 1991), the bark boiler were operated at an average of 79% of capacity, and the power boilers operated at an average of 76% of capacity.

To estimate the breakdown of the fuel types used over this time period, we analyzed the fuel reports for each specific boiler. Figure 2 shows the percentage of BTU provided by each fuel from 1980. As is shown, approximately 5% of the bark boiler output is generated by oil, while the remainder is generated by bark. According to SKC officials Messrs. Stanley and Riddle, and consistent with January 1993 data provided by SKC, this fuel ratio is not expected to change with the recycling operation. The only change is that

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some of the bark fuel will be replaced by recycled fiber rejects. However, this change will not result in significant changes in emissions.

Also shown in Figure 2 is the future operation of the boilers as assumed in the ENSR report. For SO<sub>2</sub> emissions, the modeled emission rates in the report assumed that the power boilers would operate at 100% capacity while the bark boilers would operate the remainder of the time. Based on the historical data, the ENSR estimates of the use of the power and bark boilers are not consistent with the typical operations at SKC. Furthermore, it appears that ENSR significantly overestimated the amount of oil used in the bark boilers for certain scenarios.

**B.2.2) CRITERIA POLLUTANTS**

Emissions of criteria pollutants can be estimated using a number of sources. Among the methods used by ENSR are:

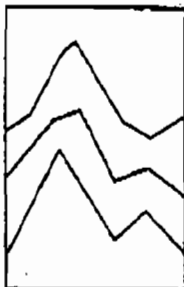
- **Mass Balance** - Mass balance assumes that the concentration of a substance in the fuel will be equal to its concentration in the exhaust gas. For example, SO<sub>2</sub> emissions could theoretically be estimated by assuming all of the sulfur in the fuel is converted to SO<sub>2</sub> in the exhaust.
- **AP-42<sup>1</sup>** - EPA's AP-42 shows national average emission rates for many different types of sources, including coal fired boilers, utility boilers, and other fuel burning facilities.
- **Stack Tests** - Stack tests are generally the best source of information on emission rates since they give results that are specific to a piece of machinery. While stack test results cannot be used in this case to estimate emissions from the CFB plant since it is not yet built, they can be used to estimate emissions from SKC, whose boilers have been running for a number of years.
- **Other** - Sources of emission rates could also include other published reports.

**B.2.2.1) SO<sub>2</sub>**

SO<sub>2</sub> is an important component of the emissions generated by the project. Given that the ENSR report and modeling by the City of Jacksonville show multiple violations of the SO<sub>2</sub> Florida Ambient Air Quality Standards (FAAQS) in the vicinity of the project, and that SO<sub>2</sub> is emitted in the highest

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<sup>1</sup> "Compilation of Air Pollutant Emission Factors. Volume I: Stationary Point and the Area Sources," U.S. EPA AP-42.



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volume of any criteria pollutant from the CFB's, the accurate estimation of the SO<sub>2</sub> emission rates for the CBCP and for SKC is critical to the project.

The estimate of SO<sub>2</sub> emissions that ENSR performed was based on two sources. For the power and bark boilers burning fuel oil, the emission factors were based on mass balance equations. For the bark boilers burning bark and recycled fiber rejects, emission rates were based on data obtained from the Seminole Kraft Corporation.

The use of mass balance assumes that all of the sulfur in the fuel oil is converted to SO<sub>2</sub>. In general, this is rarely the case. Sulfur can be emitted in the exhaust gas as sulfur, sulfur trioxide, hydrogen sulfide, and other sulfuric compounds. The use of the mass balance equation shows an emission factor of 165S where S represents the percentage of sulfur in the fuel. As a comparison, the average rates for residual oil combustion in industrial and utility boilers is 157S<sup>1</sup>.

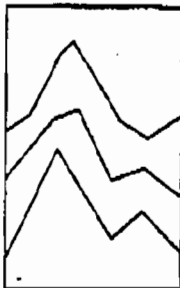
Sulfur emissions from the bark portion of the bark boilers were estimated by ENSR based on the "Seminole Kraft Corporation (Referenced Factor)" of 0.057 lb/MMBTU. We do have other sources of emission rates to compare it to. First, EPA's AP-42 reports that the average emission rate at four plants burning bark was approximately 0.0078 lb/MMBTU. Second, emission test results for the bark boilers taken in 1991 by IEA, Inc. at the SKC bark boilers show an average emission rate of 0.014 lb/MMBTU. This last number is roughly 25% of that estimated by ENSR. Therefore, the sulfur emission rate from the bark boilers appears to be significantly overestimated.

Also involved in the calculation of emissions from the SKC recycling operation is the amount of each fuel type burned by each source. For SO<sub>2</sub>, ENSR makes the assumption that the power boilers would burn at 100% of capacity during the year, and that the bark boilers would provide for the remaining steam capacity by burning 50% oil and 50% bark. As shown in the previous section on operating parameters, this is not how the facility operates. In operation, approximately 94% of SKC's SO<sub>2</sub> emissions are from the power boilers even though they generate only 63% of the total steam needs of the facility. In ENSR's analysis, the power boilers were assumed to emit 91% of the total SO<sub>2</sub> while providing 77% of the total steam needs of the facility.

When actual operating parameters are taken into account, we estimate that SO<sub>2</sub> emissions at SKC recycling are substantially lower than that which ENSR estimated. Figure 3 shows the actual SO<sub>2</sub> emissions from SKC's bark and power boilers since 1980, based on SKC's Annual Operating Reports. As is shown, SO<sub>2</sub> emissions significantly decreased in the mid 1980's with the switch from fuel oil with 2.27% to 1% sulfur. Since that time, emissions have been fairly constant, averaging 2,120 tons per year between 1988 and 1991. The

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<sup>1</sup> AP-42 page 1.3-2, Table 1.3-1.



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maximum emissions in those years was 2,239 TPY. This compares with ENSR's estimate of emissions of 3,560 TPY.

It should be noted that this difference of 1,320 TPY between ENSR's estimates and SKC's maximum emissions are based on two different steam demand scenarios. ENSR's estimates are based on an average of 640,000 lb steam/hour while the 2,240 TPY calculated above is based on the highest annual steam generation during the past four years at SKC, of 555,755 lb steam/hr. Using the actual operating parameters at a level of 640,000 lb steam/hr, we calculate that SKC would emit 2,578 TPY, which is still 982 TPY below ENSR's estimate.

While these estimates reflect historical emissions from SKC, the future SKC recycling operation almost certainly have lower SO<sub>2</sub> emissions. According to correspondence between SKC and the City of Jacksonville<sup>1</sup>, SKC currently contributes to violations of the Florida Ambient Air Quality Standard (FAAQS) for SO<sub>2</sub>. This is also confirmed by our own modeling. We understand that SKC will be required by the City to address this non-compliance. To do so, it has several possible options to accomplish this, including:

- 1) Increasing the stack heights of the SO<sub>2</sub> emitting sources,
- 2) Changing fuels,
- 3) Reducing the sulfur content of the fuel oils,
- 4) Limiting the operation of the SO<sub>2</sub> emitting sources, and/or,
- 5) Equipment retrofits.

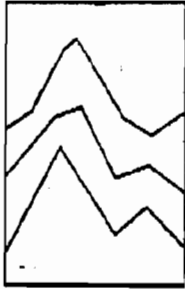
Based on our modeling of SKC's existing boilers, even with a 125 foot stack as modeled by ENSR, SKC still contributes to violations of the 24 hour SO<sub>2</sub> FAAQS standard (see Appendix I). Indeed, over the five years modeled, if SKC burned the permitted amounts of fuel, i.e., 100% capacity of all boilers burning 2.27% fuel oil, it would contribute to 24-hour SO<sub>2</sub> violations on 2,896 occasions. If the CBCP is not built, we understand that the City of Jacksonville will require SKC to reduce SO<sub>2</sub> emissions to the point that they no longer contribute to a SO<sub>2</sub> violation.<sup>2</sup>

We therefore conducted modeling to determine what possible configurations at SKC will result in reductions in SO<sub>2</sub> ambient levels so that SKC does not contribute to a violation. Based on that modeling we determined that a probable operating scenario for SKC in the absence of the CBCP is as follows:

<sup>1</sup> Letter from Robert Pace, City of Jacksonville Department of Regulatory and Environmental Services to Mike Riddie, Seminole Kraft Corp., dated December 15, 1992 and February 9, 1993.

<sup>2</sup> Letter from Robert S. Pace Chief Air Quality Division DRES City of Jacksonville to Dr. Colin J. High Resource Systems Group, Norwich, Vermont, March 31st 1993.

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- 1) Raise all SKC stacks to GEP formula height (65.5 m).
- 2) Limit oil use in bark boilers to 50% of total BTU content for use only during startup and emergency conditions.
- 3) Limit annual oil use to 10% of total BTU in bark boilers.
- 4) Limit sulfur in oil to 0.4 % for all boilers.
- 5) Assure 50% removal efficiency of SO<sub>2</sub> in bark boiler scrubbers.
- 6) Set the maximum steam production load at 700,000 lb/hr.

Given these operating parameters, the SKC sources will neither cause nor contribute to a violation of the SO<sub>2</sub> Florida AAQS standards. Furthermore, as a result of these changes, SO<sub>2</sub> emissions will likely average approximately 907 TPY. This is significantly less than the existing emissions of 2,192 TPY and ENSR's estimates of 3,560 TPY.

**B.2.2.2) NO<sub>x</sub>**

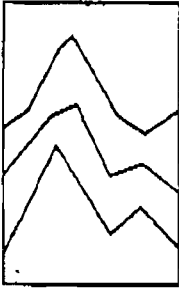
Emissions of NO<sub>x</sub> were estimated by ENSR to be 1,736 tons per year from SKC's bark and power boilers. Using the maximum fuel use over the last four years at SKC, 555,755 lb steam/hr, we calculated a total NO<sub>x</sub> emission rate of 1,354 TPY. This is 382 TPY less than the ENSR estimate. At 640,000 lb/hr of steam, we estimate emissions of 1,560 TPY, or 176 TPY less than the ENSR estimate.

The major difference between the RSG and ENSR estimate is based on the split between the bark and power boilers. The ENSR estimate is based on the worst case split between the bark and power boilers for NO<sub>x</sub>, while the RSG estimate is based on the actual split over the last four years.

An additional difference between the two methodologies is the way each interpreted the results of emissions monitoring of the bark boilers. While ENSR used the highest emission factors from the series of eight tests, RSG used the average emission factor from the eight tests.

**B.2.2.3) PM10**

Emissions of PM10 were estimated by ENSR to be 460 tons per year from SKC's bark and power boilers. Using the maximum fuel use over the last four years at SKC, 555,755 lb steam/hr, we calculated a total PM10 emission rate of 343 TPY. This is 117 TPY less than the ENSR estimate. At 640,000 lb/hr of steam, we estimate emissions of 395 TPY, or 65 TPY less than the ENSR estimate. Using the probable future scenario of 0.4% sulfur in the fuel, we calculate emissions of 312 TPY for the 640,000 lb/hr scenario and 271 TPY for the 555,755 lb/hr scenario.



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The major difference between the RSG and ENSR estimate is based on the split between the bark and power boilers. The ENSR estimate is based on the worst case split between the bark and power boilers, while the RSG estimate is based on the actual split over the last four years.

An additional difference between the two methodologies is the way each interpreted the results of emissions monitoring of the bark boilers. While ENSR used the highest emission factors from the permit conditions, RSG used the average emission factor from eight emission tests of the boiler exhaust gas.

**B.2.2.4) CO**

Emissions of CO were estimated by ENSR to be 2,191 tons per year from SKC's bark and power boilers. Using the maximum fuel use (555,755 lb steam/hr) over the last four years at SKC, we calculated a total CO emission rate of 1,299 TPY. This is 892 TPY less than the ENSR estimate. At 640,000 lb/hr of steam, we estimate emissions of 1,496 TPY, or 695 TPY less than the ENSR estimate.

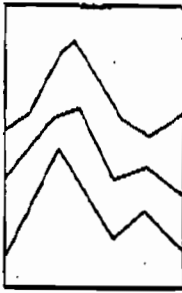
The major difference between the RSG and ENSR estimate is based on the split between the bark and power boiler. The ENSR estimate is based on the worst case split between the bark and power boiler, while the RSG estimate is based on the actual split over the last four years.

An additional difference between the two methodologies is the way each interpreted the results of emissions monitoring of the bark boilers. While ENSR used the highest emission factors from the series of eight tests, RSG used the average emission factor from the eight tests.

**B.2.3) SKC SUMMARY**

The emissions estimates that ENSR provided to forecast the annual emissions from the recycling operation for SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub> and CO overestimate actual emissions by between 2,824 tons per year and 2,030 tons per year, depending on the fuel use scenario. Table 3 summarizes these data.

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Table 3: Comparison of SKC Recycling Emissions between SKC Actual Operation and ENSR Estimates (in Tons per Year)

Pollutant	ENSR estimate based on 640,000 lb/hr steam	Maximum SKC emissions over last 4 years (555,755 lb/hr steam)	Difference between ENSR estimate and Maximum SKC emission (1)	SKC emissions based on typical operating parameters at 640,000 lb/hr steam	Difference between ENSR estimate and SKC typical for 640,000 lb/hr steam (1)
SO <sub>2</sub> - Now	3,560	2,239	-1,321	2,578	-982
- Future		907	-2,653	1,044	-2516
NO <sub>x</sub>	1,736	1,354	-382	1,560	-176
PM <sub>10</sub> -Now	572	343	-229	395	-177
- Future		217	-301	312	-260
CO	2,191	1,299	-892	1,496	-695

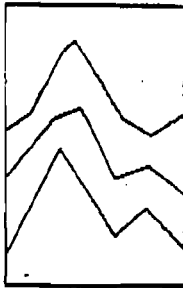
(1) negative number indicates that the ENSR estimate for SKC is higher

#### B.2.4) TOXIC EMISSION RATES

The emission rates of toxic air pollutants was also revised, incorporating the same assumptions that are described in the previous section. For purposes of this analysis, it is assumed that the toxic emissions from SKC do not vary with sulfur content of the fuel oil. Therefore, the most significant change in operating parameters that affects these emissions is the use of 555,755 lb/hr of steam, which represents the highest annual use of the past four years.

ENSR used results of actual emission tests of toxic pollutants to estimate the emissions from the bark boilers. For each pollutant, the maximum emission rate tested was used, rather than the average emission rate. Therefore, in Table 4 below, the toxic emission rates for SKC were calculated using the average emission rates.





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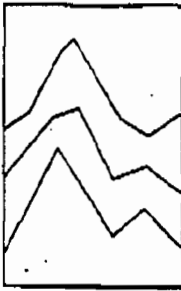
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Table 4: Comparison of SKC Recycling Toxic Air Emissions between SKC Actual Operation and ENSR Estimates (Tons per Year)

Pollutant	ENSR estimate based on 640,000 lb/hr steam	Maximum SKC emissions over last 4 years (555,755 lb/hr steam)	Difference between ENSR estimate and Maximum SKC emission (1)	SKC emissions based on typical operating parameters at 640,000 lb/hr steam	Difference between ENSR estimate and SKC typical for 640,000 (1) lb/hr steam
Lead	0.19	0.131	0.059	0.151	0.039
Mercury	0.012	0.007	0.005	0.008	0.005
Beryllium	0.013	0.012	0.001	0.013	0.000
Fluorides	203.2	176.344	26.856	203.075	0.125
Antimony	0.05	0.037	0.013	0.043	0.007
Arsenic	0.057	0.049	0.008	0.056	0.001
Barium	0.76	0.125	0.635	0.144	0.616
Bromine	15.82	13.734	2.086	15.82	0.000
Cadmium	0.057	0.039	0.018	0.045	0.012
Cobalt	5.3	4.603	0.697	5.30	0.000
HCl	21.8	18.949	2.851	21.8	0.000
Indium	1.39	1.211	0.179	1.39	0.000
Chromium VI	0.0009	0.0009	0.000	0.0009	0.000
Copper	0.72	0.608	0.112	0.700	0.020
Formaldehyde	2.38	2.071	0.309	2.38	0.000
Manganese	0.18	0.121	0.059	0.139	0.041
Molybdenum	2.82	2.444	0.376	2.82	0.000
Nickel	3.09	2.636	0.454	3.035	0.055
Phosphorus	0.74	0.552	0.188	0.636	0.104
POM	0.44	0.383	0.057	0.44	0.000
Selenium	0.008	0.006	0.002	0.007	0.001
Tin	2.49	2.162	0.328	2.490	0.000
Vanadium	10.95	9.510	1.440	10.95	0.000
Zinc	1.65	1.142	0.508	1.315	0.335

Table 4 above indicates that the ENSR report also overestimated many of the toxic pollutant emissions from the SKC recycling operation.

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## B.3) COMPARISON OF EMISSIONS

## B.3.1) NET EMISSION RATE CHANGES

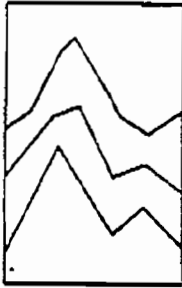
Based on the discussion above concerning the actual emissions from SKC recycling and the revisions to the FDER's Proposed Conditions of Certification, we have calculated the likely actual changes in total emissions due to the construction of the CBCP and SKC package boilers. Table 5 shows the short term emission rate comparison, i.e. the SKC recycling operation running at 640,000 lbs steam/hour compared with the annual limitations placed on the CBCP. As is shown, SO<sub>2</sub>, NO<sub>x</sub> and CO emissions each increase with the construction of the CBCP and package boilers. PM<sub>10</sub> is the only one of these pollutants that decrease in emissions due to the construction of the facilities.

Table 5: Net Emission Changes: SKC Recycling with Short Term Fuel Use Compared with Proposed Annual CBCP and SKC Package Boiler Emissions (Tons/year)

Pollutant	SKC Recycling with Power & Bark Boilers Maximum Short Term Fuel Use (640,000 lb/hr)	CBCP and SKC New Package Boilers as proposed to be permitted	Net Emission Change
SO <sub>2</sub> - Now	2,578	2,604	26
SO <sub>2</sub> - Future	1,044		949
NO <sub>x</sub>	1,560	2,525	965
PM <sub>10</sub> - Now	395	266	-129
PM <sub>10</sub> - Future	312		-46
CO	1,496	2,828	1,332

Table 6 shows the annual emission rates based on SKC burning the equivalent of the highest annual fuel consumption between 1988 and 1991 (555,755 lb/hr steam). As is shown, for SO<sub>2</sub>, NO<sub>x</sub>, and CO, the annual emissions will increase with the construction of the CBCP and SKC package boilers.

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Table 6: Net Emission Changes: SKC Recycling with Long Term Fuel Use Compared with Proposed Annual CBCP and SKC Package Boiler Emissions (Tons/year)

Pollutant	SKC Recycling with Power & Bark Boilers Annual Fuel Use (555,755 lb/hr)	CBCP and SKC New Package Boilers as proposed to be permitted	Net Emission Change
SO <sub>2</sub> - Now	2,239	2,604	366
- Future	574		2,030
NO <sub>x</sub>	1,354	2,525	1,170
PM10 - Now	343	266	-77
- Future	253		13
CO	1,299	2,828	1,529

B.3.2) ALTERNATIVE COMPARISON BASED ON HEALTH EFFECTS

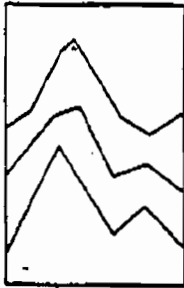
In Table ES-1 of the ENSR report, ENSR compares the total tons of pollutants which increase or decrease. They note that according to their estimates, total regulated (primarily criteria) pollutants decrease by 594 tons per year, while non-regulated toxic air pollutants increase by 29 tons per year. Then they add these together, resulting in a net decrease of total pollutants of 565 tons per year.

Leaving aside our arguments presented elsewhere in this report that these estimates may not be correct, the addition of emissions of different pollutants together implies an equivalence that is extremely misleading. ENSR's Table ES-1 implies, for example, that a ton of arsenic or a ton of mercury is equivalent to a ton of carbon monoxide or sulfur dioxide. In fact, arsenic and mercury are extremely toxic at very low concentrations, where the carbon monoxide, or sulfur dioxide are toxic only at extremely high concentrations.

In order to demonstrate the degree to which ENSR's comparison is misleading, we have undertaken an alternative type of emissions comparison. In our comparison, we expressed the emissions for each pollutant in terms of tons of "SO<sub>2</sub> equivalents", based on the health risk associated with each pollutant.

Although the standards for different pollutants are based on slightly different criteria in each case, the established regulated annual ambient standard or guideline provides a reasonable measure of the relative toxicity or health risk associated with each pollutant. Expressing annual emissions in equivalent units (in this case SO<sub>2</sub> equivalents) has been undertaken by multiplying the annual emissions of each pollutant by the ratio of its annual average ambient standard to the annual average ambient standard for SO<sub>2</sub>.

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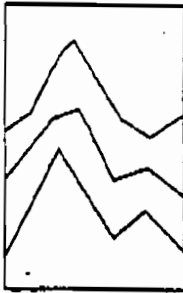
Some pollutants are not shown on the table, are those that currently do not have an appropriate annual average standard, guideline, or unit risk factor. Table 7 shows results of this normalized comparison.

Table 7: Emissions of Toxic Pollutants, and their Toxicity Relative to SO<sub>2</sub>

Pollutant	SKC Projected emissions (TPY) for compliance	CBCP emissions (TPY) (nat gas in package boilers)	CBCP- SKC (TPY)	SO <sub>2</sub> Equivalent (TPY)
SO <sub>2</sub>	907	2,604	1,697	1,697
NO <sub>x</sub>	1,354	2,363	1,009	1,009
PM-10	271	266	-5.000	-5
Lead	0.131	0.721	0.590	394
Mercury	0.007	0.100	0.094	13,415
Beryllium	0.012	0.351	0.339	169
Fluorides	176.3	8.905	-167.4	-169
Arsenic	0.049	1.701	1.652	430,977
Barium	0.125	7.300	7.176	9
Cadmium	0.039	0.382	0.343	36,728
HCl	18.95	21.71	2.762	24
Chromium VI	0.001	0.241	0.241	174,009
Formaldehyde	2.071	2.114	0.043	34
Manganese	0.121	6.002	5.881	882
Nickel	2.636	15.39	12.8	231,925
POM	0.383	0.222	-0.16	-32,138
Selenium	0.006	0.192	0.19	2
Vanadium	9.510	3.905	-5.61	-17
Total			-2,559	+858,943

The second and third columns of Table 7 show the emission rates, taken from the ENSR report, showing tons per year in emissions of each pollutant, for each case. The fourth column shows the change in emissions of each pollutant. The fifth column in Table 7 above shows the "SO<sub>2</sub> equivalent tons per year". This is calculated, as explained above, by multiplying the actual emissions of each pollutant by the ratio of the annual standard (or No Threat Levels, for toxic pollutants) to the annual standard for SO<sub>2</sub>. For example, the average annual standard for SO<sub>2</sub> is 60 µg/m<sup>3</sup>, and that of arsenic is 0.00023 µg/m<sup>3</sup>, or 260,870 times lower than SO<sub>2</sub>. The CBCP emissions of arsenic are 1.652 tons per year higher than those of SKC @ 555,755 lb steam/hr. To account for the fact that arsenic is so highly toxic compared to SO<sub>2</sub>, the difference in emissions is multiplied by 260,870, resulting in a net change of 430,977 equivalent SO<sub>2</sub> tons. This analysis (like ENSR Report Table ES-1) is an emissions comparison and

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does not estimate the health threat at a specific location. It does however, provide a more realistic presentation of the relative loading of the environment with potentially health threatening pollutants. This comparison is more appropriate for determining the relative environmental and health effects of the two facilities than simply adding tons of pollutants as if they all had the same health impact.

A summary of our analysis compared with the ENSR Report is presented in Table 8.

Table 8: The ENSR Report Emissions Shown Raw and Weighted by Toxicity - Based on ENSR Table ES-1 Comparing Case 1 and Case 3.<sup>1</sup>

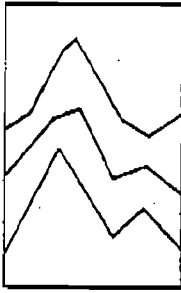
Pollutant Category	ENSR Report Net Change (tons/year)	Alternative Health based Net Change (Tons/year SO <sub>2</sub> equivalent)
Total Regulated	-594 tons	-596 tons
Total Non-Regulated	+29 tons	+446,567 tons
Total Pollutants	-565 tons	+445,971 tons

Table 8 shows that, in RSG's analysis in the third column, the fact that criteria pollutants are decreasing, based on ENSR's analysis, is vastly overwhelmed by the increase in toxic air pollutants. This clearly illustrates the fact that, while CBCP emissions may be by ENSR's estimate, lower in overall tons per year, the emissions are much more highly toxic, carcinogenic, and hazardous to health. Many of the most highly toxic emissions, such as arsenic and beryllium, increase substantially with the operation of the CBCP.

Table 9 below is a revised version of Table 8 using the same methodology described for Table 8, but using our revised estimates for both the criteria and non-regulated pollutants. Table 9 shows that with the revised estimates of the emissions of the SKC recycling and the CBCP and package boilers, the net increase in emissions is quite large. When those emissions for which there is an annual standard are expressed in terms of SO<sub>2</sub> equivalents to make them more comparable, then the total emissions equivalents of the CBCP project with package boilers is enormously higher. Again, if these SO<sub>2</sub> equivalents are considered an index of the relative health effects of pollutant loading to the environment, then it is clear that the Cedar Bay Project is substantially worse than the continued operation of the SKC recycling facility boilers as specified.

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<sup>1</sup> The emission estimates used in this table are from the ENSR Report Table ES-1. In other places in this report alternative estimates for some of these pollutants are provided.



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Table 9: Revised Emission Comparison Table Comparing Case 1 and Case 3 using RSG estimates of Actual Emission Rates.

Pollutant Category	Net Change	Net Change
	Tons /year	Equivalent SO2 Tons/year
Total Regulated	+4,181 tons	+16,481 tons
Total Non-Regulated	+4,223 tons	+805,737 tons
Total Pollutants	+ 8,403 tons	+822,218 tons

**B.3.2) COMPARISON OF GREENHOUSE GAS EMISSIONS**

The combustion of fossil fuels emits carbon dioxide, which is one of the greenhouse gases that has been demonstrated to cause global warming.<sup>1</sup> Although there is not an agreement among scientists on the magnitude of global climate change, or when and where the effects will first become acute, there is broad agreement on the process, on the role that is played by carbon dioxide in the atmosphere and on the need to adopt strategies to mitigate the effects. The U.S. Congress Office of Technology Assessment has concluded "that the decision to limit emissions (of greenhouse gases) cannot await the time when the full impacts are evident."<sup>2</sup> Therefore, although carbon dioxide is not yet a regulated pollutant, it would be prudent to consider the magnitude of carbon dioxide emissions in any comparative assessment of the environmental effects of the Cedar Bay Project.

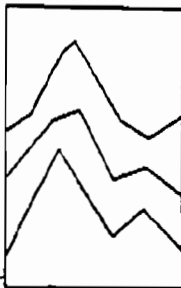
The original Cedar Bay Project as certified included a program for mitigating the effects of carbon dioxide emissions. The CBCP as proposed to be modified does not include any effective carbon dioxide mitigation measures. Table 10 shows the comparison of carbon dioxide emissions for the CBCP and the three package boilers with the existing SKC recycling operation.

Table 10: Carbon Dioxide Emissions From CBCP and SKC Package Boilers Compared with the SKC Bark and Power Boilers

Source	Tons per Year
SKC Recycling Boilers	337,162
CBCP and SKC Package Boilers	3,170,986

<sup>1</sup>Inter Governmental Panel on Climate Change, Scientific Assessment of Climate Change, Summary and Report, World Meteorological Organization, Cambridge University Press 1990 Cambridge MA.

<sup>2</sup> U.S. Congress, Office of Technology Assessment Changing By Degrees: Steps to Reduce Greenhouse Gases. U.S. Government printing House Washington D.C. 1991.



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It can be seen that the emissions of carbon dioxide from the CBCP project including the SKC package boilers are over 9 times greater than those of the SKC recycling boilers. Thus, in terms of relative contribution to global warming, the proposed CBCP is clearly worse than the existing SKC recycling operation.

#### B.4) COMPARISON OF AMBIENT AIR IMPACTS

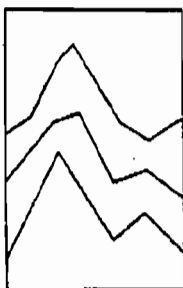
##### B.4.1) SOURCE INVENTORY

Analysis of the ambient air quality impacts requires the use of an interactive multisource model (ISCST2). The impacts of the CBCP, as proposed to be modified, are modeled with existing sources to estimate the ambient air quality impacts of the proposed source combined with all other sources. A critical part of this process requires the use of an up to date inventory of emissions and source parameters for other sources in the area. This source inventory must be produced by the applicant in cooperation with the regulatory agencies and must conform to procedures established by the U.S. EPA. Our review of the ENSR inventory involved comparing it with the complete source listing of the FDER emissions inventory, including all counties within 75 km of CBCP. Data from all sources from the FDER database over 5 tpy within about 80 km of Cedar Bay were obtained from the FDER, and entered into a database. This database was used in the following comparisons to ENSR's inventory:

- 1) *Minor Sources*—ENSR did not include any sources under 100 tons per year, even those inside the significant impact area (SIA), which extends up to 15 km from the site, in their modeling. This is clearly contrary to EPA recommended procedures<sup>1</sup>. The total emissions omitted from the modeling are 46 tpy of SO<sub>2</sub>, and 452 tpy NO<sub>x</sub>.
- 2) *Emission Rates of sources ENSR modeled*— Of the sources ENSR modeled, their total SO<sub>2</sub> emissions exceed that in the FDER database by 1,652 tpy. For NO<sub>x</sub>, their total emissions are 2,451 tpy less than the FDER database. However, there are some major sources that are missing emission rates in the FDER database.
- 3) *Screening sources outside the SIA*—The North Carolina screening method was used to determine which sources outside the SIA are to be included in modeling. ENSR used an SIA diameter of 15 km for their screening. However the sources from which they screened do not include any outside Duval County. When screening on the additional

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<sup>1</sup>US EPA, *New Source Review Workshop Manual*, October 1990.



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sources outside the county is conducted, two additional sources should be modeled, with total emissions of 1,358 tpy SO<sub>2</sub>, and 3529 tpy NO<sub>x</sub>.

The overall results of the inventory indicate that ENSR included all sources likely to significantly effect concentrations of SO<sub>2</sub>, but do not apparently include all significant sources of NO<sub>x</sub>. Their development of the emissions inventory did not follow EPA guidelines in the following ways:

- Minor sources (less than 100 tpy) were not included in the PSD inventory, and
- All sources within 50 km of the SIA were not screened.

A phone survey of sources showing the greatest discrepancies with ENSR's emission rates was conducted to verify data in the source listing of the FDER emissions inventory. For each of 47 sources the allowable emission rates of SO<sub>2</sub> and NO<sub>x</sub> listed in the FDER database were compared with the allowable emission rates of SO<sub>2</sub> and NO<sub>x</sub> listed in the ENSR database. The 20 sources for which the discrepancy in total allowable SO<sub>2</sub> and NO<sub>x</sub> emissions was greatest were selected to be contacted for verification of the FDER data. Of the 20 sources for which telephone contact was attempted, confirmation and/or correction of the FDER data was received from 10 (as of 3:00 PM April 1, 1993). At one other source the contact declined to respond. The contacts at six sources are currently reviewing the data and have not yet responded. The contacts at several other sources have not been reached for discussion.

The telephone interviews which were completed resulted in minor updates and corrections to the FDER source data. No significant errors in the FDER database were identified. The sources which were interviewed and the confirmation and/or amendments to the FDER data are shown in Appendix II.

#### B.4.2) AIR QUALITY MODELING

To determine what effects the above changes in emission rates, particularly the Future Recycling Scenario, would have on air emissions, we performed a simple set of case comparisons, similar to those performed by ENSR in chapter 2 of their report. However due to constraints, we were only able to perform these comparisons for SO<sub>2</sub>.

For the equivalent of ENSR's Case 1, we assumed that SKC would be running 640,000 lb/hour steam for the 24 hour comparisons, and 555,755 lb/hour steam for the annual comparisons. The identical polar grid network that ENSR used was also used in the modeling. Emission rates were based on 0.25% sulfur in the fuel, and a mix between bark and oil firing based on the actual usage of the boilers between 1988 and 1991. Lastly, both bark boiler stacks and the combined power boiler stack were raised to GEP stack height.

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This scenario was compared with ENSR's Case 3, except that SO<sub>2</sub> emissions at the limestone dryers and package boilers were reduced to reflect the use of 0.05% sulfur and a limit on the package boilers of 400 hours/year burning oil, with natural gas for the remainder of the year.

Table 11 shows the results of these runs for each year of meteorological data. As is shown for each year the following data is tabulated:

- The number of modeled receptors
- The sum of the change for each receptor weighted by the geographic area that the receptor represents
- The total area whose air quality worsened with CBCP
- The total area whose air quality improved with CBCP
- The highest concentration for any one receptor for CBCP and the SKC recycling operation.

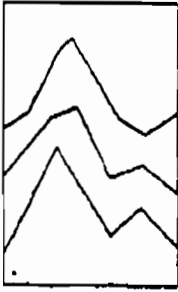
As is shown, the average change in air quality due to the CBCP is just under 1  $\mu\text{g}/\text{m}^3$ , while a significant majority of land area with the modeling region showed a higher concentrations of SO<sub>2</sub>.

Table 11: Case Comparison of Changes in Ambient Impacts between SKC Future Recycling and CBCP for SO<sub>2</sub> (24-hour averaging period)

	1983	1984	1985	1986	1987
No. Receptors	1008	1008	1008	1008	1008
No. Receptors Improved	392	334	214	273	247
Weighted Sum of Difs ( $\mu\text{g}/\text{m}^3$ )	0.23	0.32	0.41	0.32	0.42
Worse Area (km <sup>2</sup> )	1,831	2,048	2,219	2,005	2,109
Better Area (km <sup>2</sup> )	544	328	157	370	267
Max Conc CBCP ( $\mu\text{g}/\text{m}^3$ )	16.7	25.3	24.6	20.9	19.8
Max Conc SKC ( $\mu\text{g}/\text{m}^3$ )	6.5	6.3	1.8	7.3	5.5

Table 12 is similar to Table 11, but it shows the results for the annual averaging period. In this scenario, one year out of the five shows overall improvements with CBCP.

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Table 12: Case Comparison of Changes in Ambient Impacts between SKC Future Recycling and CBCP for SO<sub>2</sub> (annual average)

	1983	1984	1985	1986	1987
No. Receptors	1008	1008	1008	1008	1008
No. Receptors Improved	660	635	658	635	657
Weighted Sum of Difs ( $\mu\text{g}/\text{m}^3$ )	0.0006	0.0027	0.0010	-0.0027	0.0017
Worse Area (km <sup>2</sup> )	1,511	1,784	1,545	1,286	1,602
Better Area (km <sup>2</sup> )	864	591	830	1089	773
Max Conc CBCP ( $\mu\text{g}/\text{m}^3$ )	0.543	0.705	0.632	0.660	0.617
Max Conc SKC ( $\mu\text{g}/\text{m}^3$ )	0.331	0.352	0.333	0.350	0.436

**B.4.3) CANCER RISK ASSESSMENT**

Concentrations of criteria pollutants from SKC's recycling operation have been compared to those that would be present with CBCP. However, nowhere in their report did ENSR compare the ambient concentrations and cancer risks from toxic air emissions from CBCP to that of SKC's projected recycling operation.

The ambient concentrations of the seven known carcinogens found in emissions from SKC and CBCP, listed below, were modeled:

- Arsenic
- Beryllium
- Cadmium
- Chromium (hexavalent)
- Formaldehyde
- Nickel
- Polycyclic Aromatic Hydrocarbons

The following assumptions were made in this analysis, which differ from those made by ENSR in their analyses:

- 1) The emissions from SKC were calculated using the mean values collected in emissions test results. For formaldehyde and polycyclic aromatic hydrocarbons, ENSR emission rates were used as no tests were performed for these pollutants.
- 2) SKC's operation was assumed to operate at the highest steam production level of the past four years, with necessary modifications to ensure NAAQS compliance, including GEP stack height.

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- 3) The SKC package boilers were assumed to use natural gas for all but 400 hours of the year; emission rates of formaldehyde and polycyclic aromatic hydrocarbons were calculated using rates for the EPA's *Toxic Air Pollutant Emission Factors*.
- 4) Emission rates of the carcinogens from the CFB's were identical to those reported by ENSR, with two exceptions: hexavalent chromium and nickel. ENSR calculated these emission rates with the very optimistic assumption that 98% of each would be removed by the pollution control equipment. However, tests done at a similar plant, the AES Thames facility in Connecticut, showed much lower removal efficiencies, of 62% and 68% for nickel and chromium, respectively. Therefore, these more realistic, removal rates were used in the calculation of nickel and chromium emissions from the CFB.

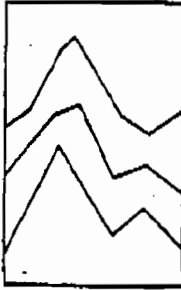
In order to evaluate the overall change in cancer risk in the area, the average annual concentrations were compared at each receptor, and averaged over the entire receptor grid. Table 13 presents the modeling results.

Table 13: Results of Cancer Risk Modeling

Pollutant	Average Change in Concentration ( $\mu\text{g}/\text{m}^3$ )	Change in Cancer Risk (... in one million)
Arsenic	0.0000731	0.318
Beryllium	0.00000303	0.00233
Cadmium	-0.0000374	-0.0657
Chromium (hexavalent)	0.0000137	16.1
Formaldehyde	-0.00153	-0.0191
Nickel	-0.000530	-0.161
Polycyclic Aromatic Hydrocarbons	-0.000342	-1.14
Total Additive Cancer Risk		14.3 in one million

The second column in Table 13 shows the changes in modeled concentration. A negative concentration changes indicate a decrease if CBCP is operating. Out of the seven pollutants, four are shown to decrease with CBCP. However, a better indication of the health effects associated with CBCP is to calculate the actual cancer risk posed by each pollutant. This is done by multiplying the change in concentration, in the second column of Table 13, by the "unit risk factor" of that carcinogen, which is a measure of the pollutant's potency as a carcinogen developed by the EPA. The third column in Table 13 shows the change in cancer risk that would result if Cedar Bay operates. These numbers

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can be added together to show an overall increase in cancer risk of 14.3 in one million with CBCP. Generally, the EPA considers any change in cancer risk greater than one in one million to be of concern, meriting at least a more detailed study. In any case, the CBCP will clearly result in an increased cancer risk to the public, which should be an important consideration in determining its environmental impacts.

It is interesting to note that, if all the concentrations in the second column were added, there would be a decrease in total pollutant concentrations. The increase in cancer risk is primarily due to fact that the hexavalent chromium, which is an extremely potent carcinogen, concentration increases. This analysis indicates that CBCP will pose an increase in cancer risk to the public, despite the fact that the sum of the pollutant concentrations decreases.

## C) COMPLIANCE WITH AIR QUALITY STANDARDS AND REGULATIONS

### C.1) FLORIDA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Modeling performed by ENSR showed a number of periods for which violations of the Florida and National Ambient Air Quality Standards (FAAQS & NAAQS) occurred. For the most part, the modeling conformed with State and Federal guidelines. However, there are three areas in which we feel the modeling may be inadequate:

- 1) **Terrain Elevations** - Terrain elevations were not modeled by ENSR. While the terrain around the facility may seem to be flat, there are actually small hills nearby which could experience higher concentrations due to their elevation. For example, just to the west of the facility, sand dunes rise to as much as 95 feet ASL. This elevation is higher than the limestone dryer stack height. There are many other areas in the significant impact area that tend to range from 10 to 40 feet ASL.
- 2) **Sulfur in Fuel** - Due to the recent proposed Conditions of Certification produced by the DER, stricter emission limitations were placed on the limestone dryers and package boilers. These were not modeled in the AAQS analyses.
- 3) **Emissions Inventory** - There are still outstanding issues concerning the emissions inventory. There appear to be several sources which were left off the inventory, as well as sources whose emissions that are not properly represented.

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In order to address these issues, RSG performed FAAQS modeling for the 24-hour SO<sub>2</sub> condition. This scenario was chosen because of the many violations of the standard were revealed by ENSR's modeling. The modeling was performed with terrain elevations along cartesian grids. Four different grids were used: The first was a 12 km by 12 km grid with 1 km spacing; the second was a 500 m spacing centered closer to the CBCP; third was a 250 m grid centered around the areas of high elevation to the west of the site; and the last were three discrete receptors placed near the intersection of Dunn Avenue and I-95. Consistent with common practice, the highest elevations for each grid square plus 10 ft were obtained from U.S. Geologic Survey Topographic Maps. The discrete receptors used actual elevations. The emission rates for the limestone dryers and package boilers were changed to reflect the currently proposed conditions of certification. No change was made to the inventory, as the outstanding issues have yet to be resolved. All other parameters remained the same as ENSR's modeling.

The results of the modeling showed that the CBCP contributed significantly to one violation (high-second-high) of the 24-hour FAAQS over the five year meteorological period. This violation occurred at one of the Dunn Avenue discrete receptors (see Appendix III).

No other averaging time or pollutants were modeled by RSG for AAQS purposes.

#### C.2) PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

The Prevention of Significant Deterioration (PSD) increments are designed to insure that the air in any one area does not significantly worsen. ENSR performed a PSD analysis using a PSD inventory and much the same modeling techniques as the AAQS analyses. Therefore we have many of the same concerns relating to the PSD analysis as we do with the NAAQS analysis, concerning terrain elevations, sulfur content in the fuel, and the emissions inventory, as described in the previous section.

We did not perform any modeling for PSD analysis. However, aside from the above points, ENSR's modeling appears reasonable.

#### D) SUMMARY

The main findings of the review undertaken by Resource Systems Group are as follows:

- 1) The ENSR report over-estimates the actual or expected emissions of the five boilers at SKC operating without the CBCP. This

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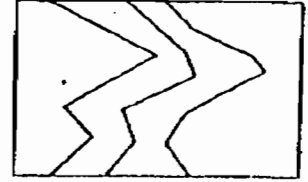
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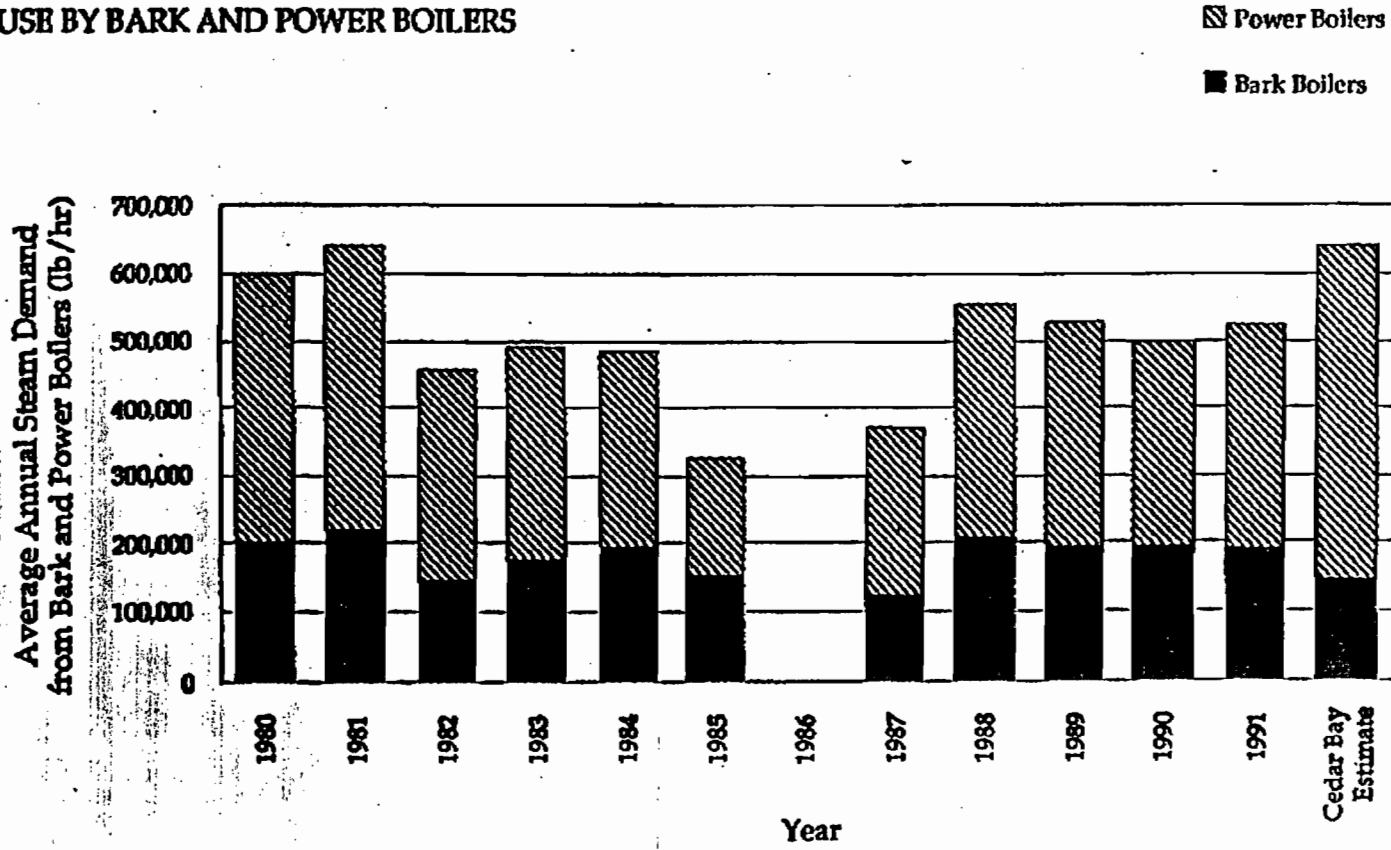
significantly alters the comparisons of the CBCP with SKC as required by the Siting Board Order.

- 2) The SKC recycling facility, as it exists at present, contributes to modeled violations of the Florida 24-hour SO<sub>2</sub> standard. This will require that, in the event that the CBCP is not in operation, the SKC facility will be required to reduce its emissions and change its operating parameters so that it no longer significantly contributes to a violation. The specifications of the SKC facility operations needed to meet those requirements should be used in making comparisons required by the Siting Boards Order. by rule?
- 3) A comparison of the emissions of the CBCP and package boilers (Case 3) with the SKC recycling facility (Case 1), when corrected to reflect the deficiencies described in 1) and 2) above, shows that:
  - the CBCP (Case 1) has higher emissions of SO<sub>2</sub>, NO<sub>x</sub>, and CO and has only slightly lower emissions of PM<sub>10</sub>.
  - the emissions of hazardous air pollutants are variable but the emissions of the most hazardous pollutants are higher from the CBCP (Case 3).
- 4) The aggregate cancer risk associated with the carcinogenic pollutants is greater for the CBCP (Case 3) than for the SKC recycling operation (Case 1), as revised.
- 5) Revised modeling conducted by Resource Systems Group shows that the ambient impacts of the CBCP for SO<sub>2</sub> are greater than for SKC recycling operations without the CBCP.
- 6) Revised modeling conducted by Resource Systems Group shows that the CBCP significantly contributes to a violation of the Florida 24-hour SO<sub>2</sub> ambient air quality standard.

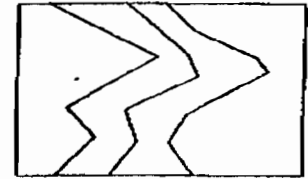
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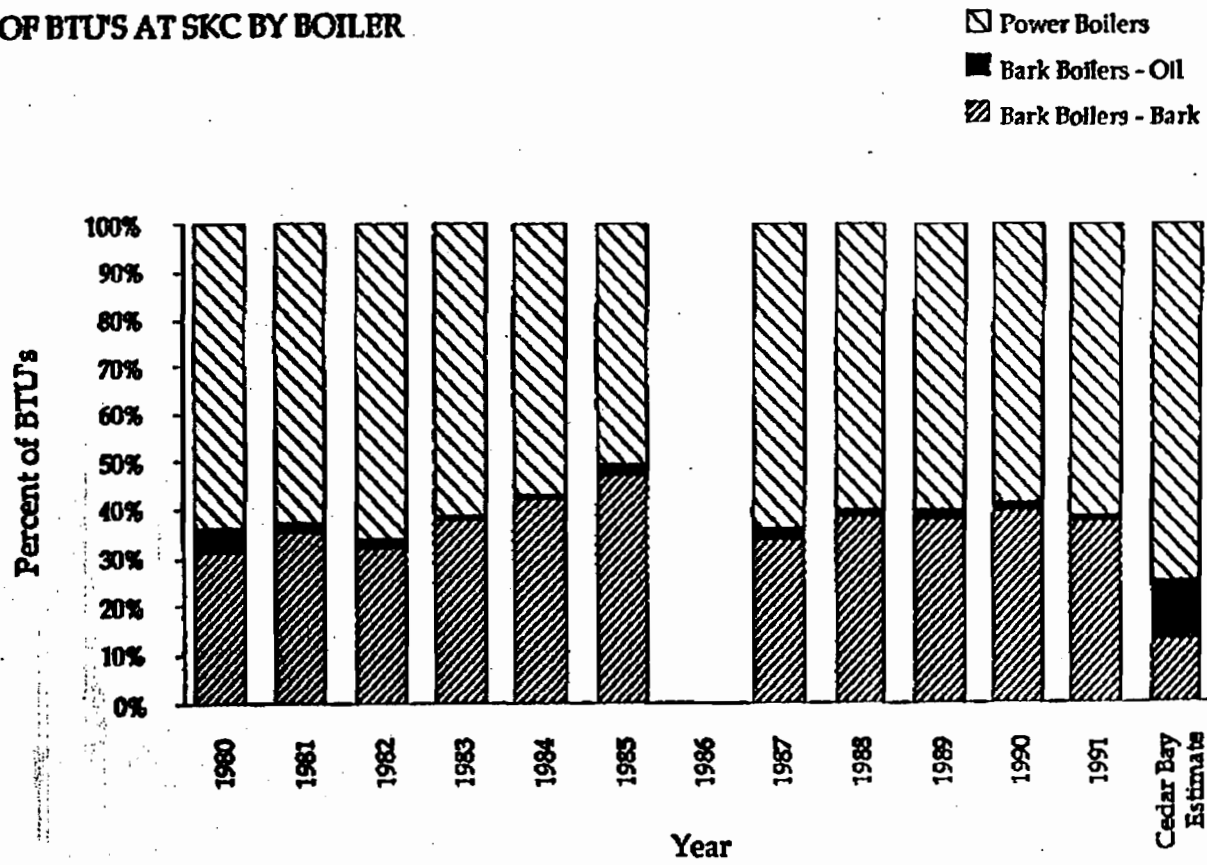
STEAM USE BY BARK AND POWER BOILERS



Cedar Bay Report  
Figure 1



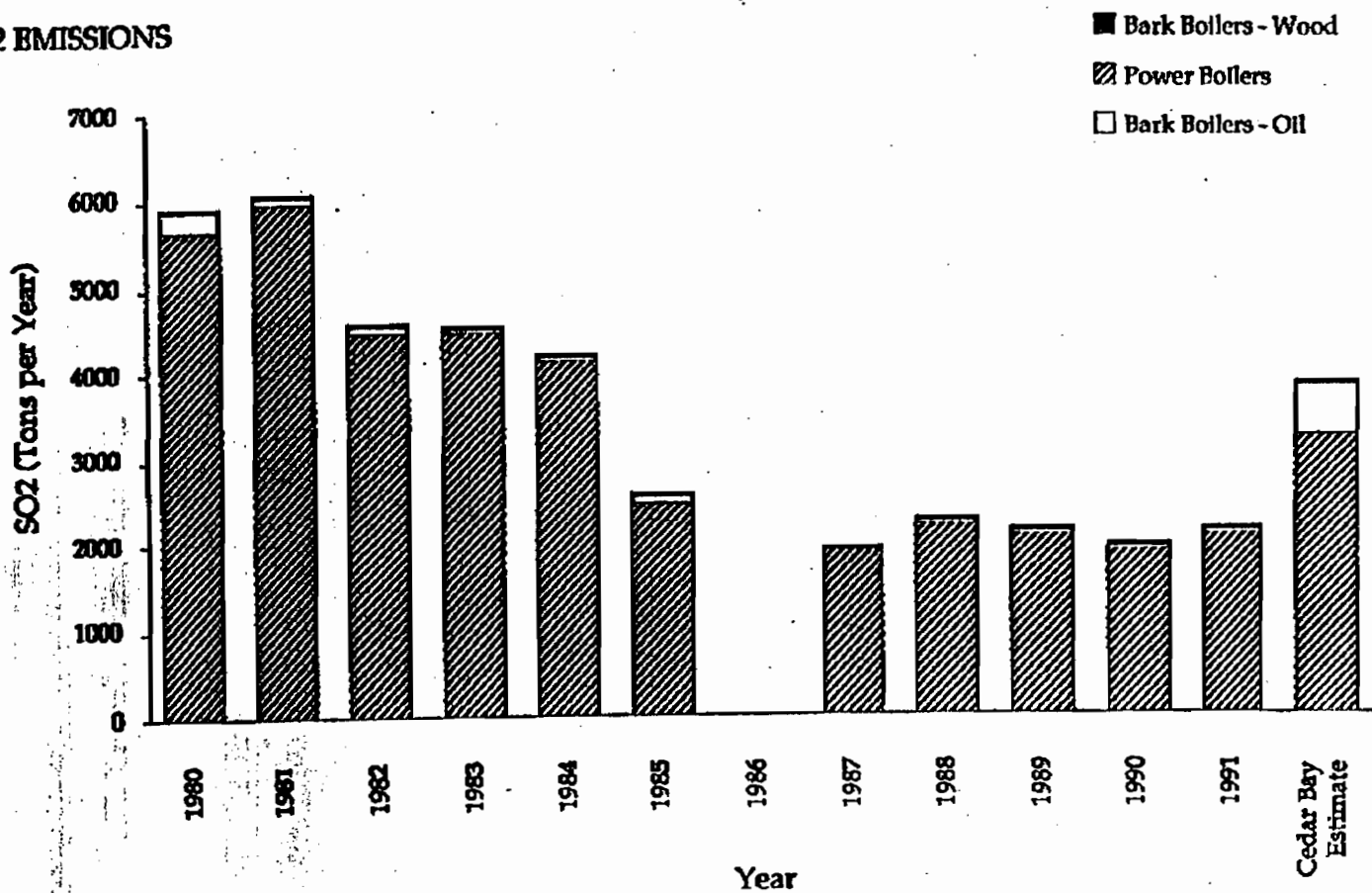
PERCENT OF BTU'S AT SKC BY BOILER



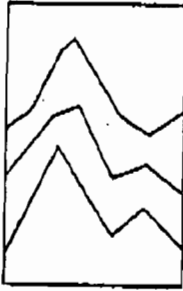




### SKC SO2 EMISSIONS



Cedar Bay Report  
Figure 3



## APPENDIX I

### NAAQS Modeling Results

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Appendix Summary of NAAQS Modeling Violations where CBCP or SKC Future Contribute to Violations

CBCP

SKC Recycling Max  
Emissions, 125' stack

SKC Future Recycling  
.4% Sulphur  
50%/50% bark/oil max  
700,000 lbs/hr steam max

sofmax24

Date	UTM X	UTM Y	ELEV	ALL SRC	CFB	LSO1	LSO2	TOTAL	PACKG	ALL SRC	POWER	BARK	TOTAL	ALL SRC	POWER	BARK	TOTAL
840206	446500	3362500	9.1	342.45	1.12	.02	.02	1.16	.45	433.95	35.24	57.86	93.11	345.05	3.11	1.09	4.20
840214	446500	3362500	9.1	292.08	1.29	.03	.03	1.36	.50	404.08	25.91	87.95	113.87	294.50	2.73	1.56	4.29
840929	446500	3362500	9.1	354.32	1.15	.03	.03	1.20	.53	464.98	34.97	77.35	112.32	357.44	3.37	1.49	4.85

Violations Summary:

Cedar Bay: 0  
 Package Boilers: 0  
 SKC Recycling (125' stack): 724  
 SKC Recycling (reduced emissions): 0

Date	UTM X	UTM Y	ELEV	ALL SRC	CFB	LSO1	LSO2	TOTAL	PACKG	ALL SRC	POWER	BARK	TOTAL	ALL SRC	POWER	BARK	TOTAL
851109	440250	3365750	24.4	241.96	.59	.03	.02	.64	.69	411.77	39.13	82.60	121.74	295.35	3.61	1.72	5.32
851109	439875	3365875	15.2	244.90	1.24	.03	.03	1.29	.65	384.88	42.48	79.45	121.93	269.01	4.36	1.69	6.06

Violations Summary:

Cedar Bay: 0  
 Package Boilers: 0  
 SKC Recycling (125' stack): 831  
 SKC Recycling (reduced emissions): 2

Date	UTM X	UTM Y	ELEV	ALL SRC	CFB	LSO1	LSO2	TOTAL	PACKG	ALL SRC	POWER	BARK	TOTAL	ALL SRC	POWER	BARK	TOTAL
860405	437400	3367000	6.1	643.90	5.09	.02	.02	5.12	.37	713.01	24.24	45.36	69.60	647.47	3.14	.92	4.06
860405	437300	3366900	9.1	535.59	4.50	.01	.01	4.53	.34	642.10	21.33	40.04	61.38	584.29	2.75	.82	3.56
860405	436900	3367250	3.0	236.63	4.70	.01	.01	4.72	.32	291.42	21.31	38.53	59.84	235.15	2.78	.79	3.57

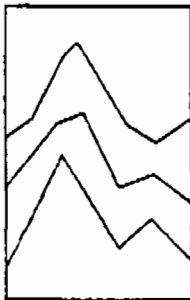
Violations Summary:

Cedar Bay: 1  
 Package Boilers: 0  
 SKC Recycling (125' stack): 632  
 SKC Recycling (reduced emissions): 0

Date	UTM X	UTM Y	ELEV	ALL SRC	CFB	LSO1	LSO2	TOTAL	PACKG	ALL SRC	POWER	BARK	TOTAL	ALL SRC	POWER	BARK	TOTAL
870826	439875	3365625	21.3	240.56	3.71	.01	.01	3.73	.37	301.77	25.92	39.39	65.31	240.55	3.21	.88	4.09
870929	446500	3362500	9.1	409.25	3.97	.02	.02	4.01	.26	466.12	13.55	47.59	61.14	407.73	1.94	.80	2.75

Violations Summary:

Cedar Bay: 0  
 Package Boilers: 0  
 SKC Recycling (125' stack): 709  
 SKC Recycling (reduced emissions): 0

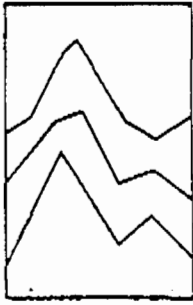


**APPENDIX II**

**Table A-II: Revised Estimates of Hazardous Emissions from CBCP  
(tons per year)**

Pollutant	Revised Emissions
Lead	0.721
Beryllium	0.100
Mercury	0.351
Fluorides	8.905
Antimony	0.131
Arsenic	1.701
Barium	7.300
Bromine	0.00117
Cadmium	0.382
Cobalt	0.457
HCl	21.71
Indium	0.00271
Chromium VI	0.241
Copper	1.007
Formaldehyde	2.114
Manganese	6.002
Molybdenum	1.208
Nickel	15.39
Phosphorus	4.018
POM	0.222
Selenium	0.192
Tin	0.525
Vanadium	3.905
Zinc	44.52
Radionuclides	0.02

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## APPENDIX 3

### Results of Telephone Survey

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GROUP**

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Facility ID	Owner/Company	City	Emission Point	Source Description	Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)
31JAX140025	Sawtooth Electric Coop	Palm Bay	1	#1 unit waste and lpd	Active			12717	32791	10556	18380
			2	#2 unit waste & lpd	Active			12505	32791	9819	18380
			3	#1 unit waste and lpd	Confirmed	June '88		11691	23929	9929	12990
			4	Confirmed	June '84		11691	23929	10175.3	12990	

Confirmed/Corrected: Palm Bay County

Comments: Amended figures in tpy are calculated from Btu/MMBtu and heat input in MMBtu/yr.

Facility ID	Owner/Company	City	Emission Point	Source Description	Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)		
31DVL190008	Anheuser Busch Inc	Jacksonville	1	#1 boiler no. 9 fuel & nat gas	Active			1.09	530	11	85		
			2	#2 boiler no. 9 fuel & nat gas	Active			0.48	530	7	85		
			3	#3 boiler	Active			0.32	530	0.6	85		
			4	#4 boiler	Active			0.28		3	85		
			5	grain dryer #1 w/scrubber	Active					269		45	
			6	grain dryer #2	Active					386		80	
			27	98.7 MMBtu/yr solar mass gas-fired turbine	Active					0	0	205	329
			28	direct burner & heat recovery boiler	Active					6	0	6	17
			30	wastewater boiler for anaerobic treatment facility	Active						18		5
			31	biogas flare for wastewater treatment facility	Active						37		21
			1	confirmed	confirmed	early '70's	confirmed	not confirmed	confirmed	not confirmed	confirmed	not confirmed	
			2	confirmed	confirmed	unknown	confirmed	not confirmed	confirmed	not confirmed	confirmed	not confirmed	
			3	confirmed	confirmed	unknown	confirmed	not confirmed	confirmed	not confirmed	not stated	not confirmed	
			4	confirmed	confirmed	unknown	confirmed	unknown	confirmed	unknown	confirmed	not confirmed	
			5	confirmed	inactive		inactive		low years				
			6	confirmed	inactive		inactive		low years				
			27	confirmed	confirmed	unknown	confirmed	not stated	confirmed	confirmed			
			28	confirmed	confirmed	unknown	confirmed	not stated	confirmed	confirmed			
			30	confirmed	inactive	was not built							
			31	confirmed	currently under construction permit			not stated		not stated			
			?	back-up biogas flare	currently under construction permit			not stated		not stated			
			?	#28 scrubber	currently under construction permit			not stated		not stated			

Confirmed/Corrected:

Comments: Confirmed actual figures and explained that the figures are calculated not measured.

Facility ID	Owner/Company	City	Emission Point	Source Description	Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)	
31DVL190000	Johnson Smurk Corp Container Deck	Jacksonville	4	#4 smelt dissolving tank	Active			14				
			5	black liquor recovery boiler #1	Active				751			
			6	lime kiln w/scrubber	Inactive					22		75
			7	#2 lime kiln w/scrubber	Inactive					23		78
			11	bedrock boiler #10	Inactive				773	1265	1192	1352
			12	coal/bark boiler	Inactive					15		
			13	#10 coal/bark boiler	Active				773	1265	1192	1352
			19	#9 lime kiln	Active				21	46		
			4	Confirmed	Confirmed	Nov '88	Confirmed	not stated	none	not stated		
			5	Confirmed	Confirmed	Nov '88	Confirmed	not stated	none	not stated		
			6	Confirmed	Confirmed	unknown	unknown	45.6		not stated		
			7	Confirmed	Confirmed	unknown	approx. '83	unknown	unknown	unknown	unknown	
			11	Confirmed	Confirmed	unknown	unknown	unknown	unknown	unknown	unknown	
			12	Confirmed	Confirmed	unknown	unknown	unknown	unknown	unknown	unknown	
			13	Confirmed	Confirmed	June '83	Confirmed	Confirmed	Confirmed	Confirmed		
			23	Confirmed	Confirmed	May '86	Confirmed	Confirmed	Confirmed	Confirmed		
			24	Confirmed	Confirmed	unknown	unknown	not stated	Confirmed	none	not stated	
			25	Confirmed	Confirmed	unknown	unknown	not stated	Confirmed	none	not stated	

Confirmed/Corrected:

Comments: Figures are unknown for inactive sources.

Facility ID	Owner/Company	City	Emission Point	Source Description	Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)	
31DVL190048	David Asphalt Products	Jacksonville	1	asphalt batch plant	Active				6.88			
			2	asphalt drum mix plant	Active					88.37		
			3	unknown source	Confirmed							
4	Confirmed	Inactive		inactive		app. '70 or '78	unknown	not stated		not stated		

Confirmed/Corrected:

Comments: Received a new permit February 23, 1993 which does not state allowable SO<sub>2</sub> or NO<sub>x</sub> levels for any source.

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APR-02-1993 10:09 FROM: ENR Action, MA TO: 9190468129645402027 P.04/07

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (tpy)	Allowable SO <sub>2</sub> (tpy)	Actual NO <sub>x</sub> (tpy)	Allowable NO <sub>x</sub> (tpy)
			Point	Source Description							
31JAX020001	Northwest Florida State Hospital	MacClenny	1	#1 #1#w boiler, fired w/MS fuel gas spc	Active			30	205	4	
			2	#2 #1#w boiler, fired w/MS	Active			30	205	4	
			3	#3 #1#w boiler	Active			30	205	4	
			1	Confirmed	Confirmed	1997		32.98	unknown	3.71	unknown
			2	Confirmed	Confirmed	1997		19.84	unknown	1.85	unknown
			3	Confirmed	Confirmed	1997		24.22	unknown	4.20	unknown
Comments:			Amended figures are actual 1992 emissions based on hours of operation.								

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (tpy)	Allowable SO <sub>2</sub> (tpy)	Actual NO <sub>x</sub> (tpy)	Allowable NO <sub>x</sub> (tpy)
			Point	Source Description							
31DVL190071	Union Camp Corp (Tapers & Aramite Div)	Jacksonville	1	waste incinerator	Active			200		4	
			3	boiler #2	Active			200		4	
			14	boiler #5 77 MIBShay (Babcock & Wilcox)	Active	10/9/79		35		17	
			23	humidate spray dryer (baghouse)	Inactive	7/15/83					10
			1	Confirmed	Confirmed	unknown		Confirmed	not stated	Confirmed	not stated
			3	Confirmed	Confirmed	unknown		2?	350	19.2	not stated
14	Confirmed	Confirmed	unknown		Confirmed	348	Confirmed	not stated			
23	Does Not Exist	Confirmed	unknown	unknown					not stated		
Comments:			Actual figures are calculated based on sulfur content & AP 42.								

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (tpy)	Allowable SO <sub>2</sub> (tpy)	Actual NO <sub>x</sub> (tpy)	Allowable NO <sub>x</sub> (tpy)		
			Point	Source Description									
31DVL180045	Jacksonville Electric Authority	Jacksonville	1	#1 steam generator	Active			7344	23996.0	1716			
			2	#2 steam generator	Active							4548.6p	
			3	#3 steam generator	Active				5052.2	43648.2	4366	6813	
			6	combustion turbine #3 using #002 oil	Active				6.56		6.35	627	
			7	combustion turbine #4	Active				4.09		3.93	627	
			8	combustion turbine #5	Active				12.24		11.86	627	
			9	combustion turbine #6	Active				4.89		4.84		
			14	oilgas fired auxiliary boiler "A"	Active				54.98	20		11.4	
			1	Confirmed	Confirmed							not stated	
			2	Confirmed	Confirmed							not stated	
			3	Confirmed	Confirmed							confirmed	
			6	Confirmed	Confirmed							not stated	
			7	Confirmed	Confirmed							not stated	
			8	Confirmed	Confirmed							not stated	
9	Confirmed	Confirmed							not stated				
14	Confirmed	Confirmed							not stated				
Comments:			NO <sub>x</sub> is not stated in the permit (except for source 3). Other numbers are approximately correct.										

Best Available Copy

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)		
			Point	Source Description									
31DVL100046	Jacksonville Electric Authority	Jacksonville	1	#1 steam generator	Active				1930				
			2	#2 steam generator	Active				1930				
			3	#3 steam generator	Active					2775			
			4	#4 steam generator	Active					3635.1	23.37		
			5	#5 steam generator	Active					41.91	7227	621.21	
			10	oil/gas fired auxiliary boiler	Active	10/15/84				0.01		2.41	3
			1	permanently shut down	Inactive	1980	1992						not stated
			2	permanently shut down	Inactive	1980	1992						not stated
			3	Confirmed	Confirmed								not stated
			4	Confirmed	Confirmed								not stated
			5	Confirmed	Confirmed								not stated
			10	Confirmed	Confirmed								not stated

Confirmed/Corrected: 10, 1, 2, 3, 4, 5, 10

Comments: NO<sub>x</sub> is not stated in the permit. Other numbers are approximately correct. Sources 1 & 2 are permanently shut down.

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)		
			Point	Source Description									
31DVL100047	Jacksonville Electric Authority	Jacksonville	4	combustion turbine #4	Active			0.28		0.25	97.76		
			5	combustion turbine #5	Active				2.8		2.71	97.7	
			6	combustion turbine #6	Active					4e		5e	
			7	#6 steam generator	Inactive						2807		
			8	#8 steam generator	Active						2808.5		
			9	#10 steam generator	Active					24.74	6432	158.54	
			13	Oil/gas fired auxiliary boiler	Active	10/15/84				0.01	42.4p	2.73	11.78p
			4	Confirmed	Confirmed								not stated
			5	Confirmed	Confirmed								not stated
			6	Confirmed	Confirmed								not stated
			7	Confirmed	Confirmed								not stated
			8	Confirmed	Confirmed								not stated
			9	Confirmed	Confirmed								not stated
13	Confirmed	Confirmed								not stated			

Confirmed/Corrected: 4, 5, 6, 7, 8, 9, 13

Comments: NO<sub>x</sub> is not stated in the permit. Other numbers are approximately correct.

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)	
			Point	Source Description								
31JAX100001	Jacksonville Electric Authority	Jacksonville	1	#1 steam generator unit	Active			8567	32293	12045	16148	
			2	#2 steam generator	Active			10115	32293	12769	16148	
			7	Confirmed	Confirmed					20908		conf(approx.)
			10	Confirmed	Confirmed					20908		conf(approx.)

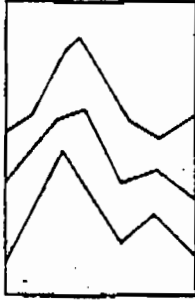
Confirmed/Corrected: 7, 10

Comments: Allowable SO<sub>2</sub> was incorrect in DER data.

Facility ID	Owner/Company	City	Emission		Status	Start Up Date	Shut Down Date	Actual SO <sub>2</sub> (t/yr)	Allowable SO <sub>2</sub> (t/yr)	Actual NO <sub>x</sub> (t/yr)	Allowable NO <sub>x</sub> (t/yr)
			Point	Source Description							
31DVL100002	Celotex Corp	Jacksonville	7	calcining kettle burner #1	Active			0.0183		4	
			8	bagport model MBGV burner	Active			0.091		21	
			11	calcining kettle burner #2	Active			0.0183		4	
			12	calcining kettle #3	Active			0.0183		4	
			13	Mazon model 10-NOx burner	Active			0.09		21	
			14	Hauck model 784 gas k burner	Active			0.09		21	
15	Hauck model 784 gas k burner	Active			0.09		21				

Comments: Declined to respond to inquiry regarding accuracy of data.





## APPENDIX IV

### SKC Operational Scenarios

**RESOURCE  
SYSTEMS  
GROUP**

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Appendix 4: Emission Rates

Boiler	Fuel	SO <sub>2</sub> Emission lb/MMBTU	NO <sub>x</sub> Emission lb/MMBTU	PM <sub>10</sub> Emission lb/MMBTU	CO Emission lb/MMBTU
Bark	Bark	0.014	0.299	0.141	0.223 From Test Results
Bark	Oil	0.650	0.447	0.100	0.039 From ENSR estimates
Power	Oil	1.047	0.447	0.071	0.633 From AP-42

Scenario 1: Average Fuel Use Over the Last 4 Years

Boiler	Fuel	MMBTU/yr	Emissions (t/yr)				Emissions (TPY)			
			SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO
Bark	Bark	229	0.608	10.648	5.112	32.450	18	370	178	1183
Bark	Oil	16	1.060	0.876	0.166	0.085	38	31	7	2
Power	Oil	480	69.404	28.370	4.030	1.873	2065	882	140	85
							2120	1283	325	1230

Scenario 2: 840,000 lb Steam/Hr based on boiler use over the last 4 years

Boiler	Fuel	MMBTU/yr	Emissions (t/yr)				Emissions (TPY)			
			SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO
Bark	Bark	350	0.619	12.847	6.210	40.873	21	450	218	1414
Bark	Oil	19	1.319	1.087	0.230	0.073	46	37	8	3
Power	Oil	648	72.232	30.948	4.800	2.277	8111	1072	170	79
with 2.27% S:							2578	1580	395	1486
Bark	Oil		2.891							
Power	Oil		163.866							
With 0.4% S:										
Bark	Oil		0.825				18		4	
Power	Oil		28.893				1004		82	
							1044		312	

Scenario 3: Maximum Fuel Use Over the Last 4 Years

Boiler	Fuel	MMBTU/yr	Emissions (t/yr)				Emissions (TPY)			
			SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO
Bark	Bark	304	0.598	11.843	6.399	35.319	19	381	148	1228
Bark	Oil	18	1.140	0.927	0.207	0.088	40	32	7	2
Power	Oil	476	62.784	28.787	4.258	1.978	2180	931	148	68
with 2.27% S:							2239	1354	343	1299
Bark	Oil		2.899							
Power	Oil		142.363							
With 0.4% S:										
Bark	Oil		0.488				16		4	
Power	Oil		25.099				872		80	
							907		871	

Scenario 4: Full Capacity, Maximum SO<sub>2</sub> Emissions

Boiler	Fuel	MMBTU/yr	Emissions (t/yr)				Emissions (TPY)		
			SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	CO	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>
Bark	Bark	0	0.000	0.000	0.000	0.000	0	0	0
Bark	Oil	209	26.749	21.740	4.863	1.805	930	756	168
Power	Oil	877	89.261	38.139	6.056	2.815	3104	1325	211
with 2.27% S:							4033	2081	380
Bark	Oil		68.721						
Power	Oil		202.547						

Proposed Emissions Limitations of OSCP and SKO.

	SO <sub>2</sub> Limit system Dryer	CFB	Fugitive Cooling Tower	Total
SO <sub>2</sub>	4	2.3	2566	2,604
NO <sub>x</sub>	310	0.5	2208	2,525
PM	0	0.84	234	268
CO	553	1.82	2273	2,828

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET  
POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 681-2964

April 2, 1993

CARLOS ALVAREZ  
JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN BLIZZARD  
ELIZABETH C. BOWMAN  
WILLIAM L. BOYD, IV  
RICHARD S. BRIGHTMAN  
PETER C. CUNNINGHAM  
RALPH A. DeMEO  
THOMAS M. DeROSE  
WILLIAM H. GREEN  
WADE L. HOPPING  
FRANK E. MATTHEWS  
RICHARD D. MELSON  
WILLIAM D. PRESTON  
CAROLYN S. RAEPPLÉ  
GARY P. SAMS  
ROBERT P. SMITH  
CHERYL G. STUART

C. ALLEN CULP, JR.  
JONATHAN S. FOX  
JAMES C. GOODLETT  
GARY K. HUNTER, JR.  
DALANA W. JOHNSON  
RICHARD W. MOORE  
ANGELA R. MORRISON  
MARIBEL N. NICHOLSON  
LAURA BOYD PEARCE  
GARY V. PERKO  
MICHAEL P. PETROVICH  
DOUGLAS S. ROBERTS  
JULIE B. ROME  
KRISTIN C. RUBIN  
CECELIA C. SMITH

OF COUNSEL  
W. ROBERT FOKES

Clair Fancy  
Division of Air Resources Management  
Department of Environmental Regulation  
2600 Blair Stone Road, Suite 306  
Tallahassee, FL 32399

Re: Cedar Bay Cogeneration Project - DOAH Case No. 88-5740

Dear Clair:


Enclosed is a Subpoena Ad Testificandum requesting your availability to appear as a witness at the upcoming hearing. We realize you are listed to testify at this hearing. This subpoena is mostly a formality to preserve our ability to call you as a witness in this proceeding that has become highly contentious. Should some unanticipated event cause you to be unavailable to testify during the scheduled hearing dates, we would be able to get leave to have you testify at a later date. It is for that reason we must use this subpoena.

It is my understanding that, pursuant to §92.142(2), Fla. Stat., a witness fee is not required for an employee of the state who is required to appear as an official witness before a hearing officer. If this is not the case, a witness fee can be negotiated at a later time.

At this time we are uncertain of the exact time you will be required to testify. Our intent is to work with you in scheduling your appearance. If you are aware of any times you will not be available during the length of this hearing please contact Gail Steels at the above number and let her know. Otherwise we will assume you will be available throughout the hearing.

Should you have any questions please let me know.

Sincerely,



Douglas S. Roberts

cc: Richard T. Donelan, Jr.

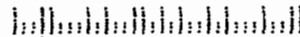
HOPPING BOYD GREEN & SAMS

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314



Clair Fancy  
Division of Air Resources Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Room 306  
Tallahassee, FL 32399



HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 681-2964

April 16, 1993

CARLOS ALVAREZ  
JAMES S. ALVES  
BRIAN H. BIBEAU  
KATHLEEN BLIZZARD  
ELIZABETH C. BOWMAN  
WILLIAM L. BOYD, IV  
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OF COUNSEL  
W. ROBERT FOKES

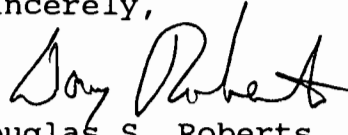
Clair Fancy  
Division of Air Resources Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Room 306  
Tallahassee, FL 32399

Re: Cedar Bay Cogeneration Project - DOAH Case No. 88-5740

Dear Clair:

As you are no doubt aware, the above-referenced case has been concluded via a Settlement Stipulation amongst all the parties. The Hearing Officer has relinquished jurisdiction to the Governor and Cabinet and has ordered that a hearing will not be necessary. You are therefore released from the Subpoena Ad Testificandum served on you on April 5, 1993 to testify at the Cedar Bay modification hearing.

Sincerely,



Douglas S. Roberts

cc: Richard Donelan

RECEIVED

APR 19 1993

Division of Air  
Resources Management

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

SEE ATTACHED FOR CASE STYLE  
AND CASE NUMBER

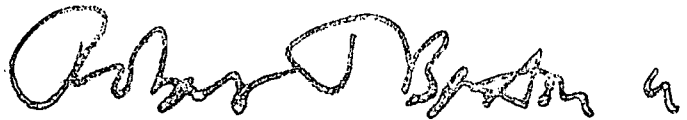
SUBPOENA AD TESTIFICANDUM

TO: CLAIR FANCY, P.E.  
Division of Air Resources Management  
Department of Environmental Regulation  
2600 Blair Stone Road, Room 306  
Tallahassee, FL 32399

YOU ARE HEREBY COMMANDED to appear at Holiday Inn Jacksonville  
Airport, Jacksonville, FL to testify at a ~~deposition~~/final  
hearing (strike one) at 10 o'clock <sup>a</sup>    .m., on the 13th day  
of April, 19 93.

YOU SHALL RESPOND to this subpoena as directed unless excused by the  
party who requested issuance of the subpoena or by order of the Division of  
Administrative Hearings.

ISSUED this 31st day of March, 1993, at Tallahassee, Florida.



THIS SUBPOENA HAS BEEN ISSUED  
UPON THE REQUEST OF:

Name: Gary Sams, Esq.  
HOPPING, BOYD, ET AL.  
Address: P.O. Box 6526  
Tallahassee, FL 32314  
Phone: (904) 222-7500

ROBERT T. BENTON, II  
Hearing Officer  
Division of Administrative Hearings  
The DeSoto Building  
1230 Apalachee Parkway  
Tallahassee, FL 32399-1550  
(904) 488-9675

\* Beginning on this day and continuing through April 30, 1993, notification  
of exact date and location of required appearance at hearing will be  
given by telephone by Petitioner's counsel. If you are aware of any  
times during the scheduled period for the hearing when you will be  
unavailable to appear as a witness during normal business hours,  
you should inform the undersigned counsel of those periods you will  
be unavailable.

**AUTHORITY:**  
Florida Statutes 120.58(1),(3)

(1)(b) An agency or its duly empowered presiding officer or a hearing officer has the power to swear witnesses and take their testimony under oath, to issue subpoenas upon the written request of any party or upon its own motion, and to effect discovery on the written request of any party by any means available to the courts and in the manner provided in the Florida Rules of Civil Procedure, including the imposition of sanctions, except contempt ....

(3) A party may seek enforcement of a subpoena, order directing discovery, or order imposing sanctions issued under the authority of this act by filing a petition for enforcement in the circuit court of the judicial circuit in which the person failing to comply with the subpoena or order resides. A failure to comply with an order of the court shall result in a finding of contempt of court. However, no person shall be in contempt while a subpoena is being challenged under subsection (2). The court may award to the prevailing party all or part of the costs and attorney's fees incurred in obtaining the court order whenever the court determines that such an award should be granted under the Florida Rules of Civil Procedure.

**Florida Administrative Code Rule 60Q-2.021**

(1) Upon request, the Hearing Officer before whom the case is pending shall issue subpoenas on forms supplied by the Division. Subpoenas shall issue in blank except for the style of the case, the case number, the name, address and telephone number of the attorney or party requesting the subpoena, and the Hearing Officer's signature, which may be by facsimile stamp.

(2) Any party or any person on whom a subpoena is served or to whom a subpoena is directed, may file a motion to quash or for protective order with the Hearing Officer before whom the case is pending.

(3) A subpoena may be served by any person authorized by law to serve process or by any person who is not a party and who is of majority age. Service shall be made by delivering a copy thereof to the person named in the subpoena. Proof of such service shall be made by affidavit of the person making service if not served by an officer authorized by law to do so.

(4) Witness fees shall be paid by the party at whose instance the witness is summoned. Witness fees shall be tendered at the time of service of a subpoena. Except in the case of state employees, the fees allowed shall be the same as those allowed by the circuit courts of the state. State employees shall be entitled to compensation at the rate provided under Section 112.061, Florida Statutes. This section shall not limit the fees of expert witnesses. Specific Authority 120.53(1), 120.65(7), F.S. Law implemented 120.57, 120.58, F.S.

Received this subpoena on

\_\_\_\_\_,  
19\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_M.,  
and served the same on \_\_\_\_\_,  
at \_\_\_\_\_ o'clock \_\_\_\_M., by  
delivering a true copy thereof (together  
with the fee for one day's attendance and  
the mileage allowed by law\*) to:

**RETURN IF SERVED BY SHERIFF:**

Dated \_\_\_\_\_,  
19\_\_\_\_, \_\_\_\_\_,  
Sheriff of \_\_\_\_\_  
County, Florida.

By: \_\_\_\_\_  
(Deputy Sheriff)

**RETURN IF SERVED BY OTHER QUALIFIED PERSON:**

Dated \_\_\_\_\_, 19\_\_\_\_.  
By: \_\_\_\_\_  
Subscribed and sworn to before me,  
a \_\_\_\_\_,  
this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.  
By: \_\_\_\_\_

**NOTE:** Affidavit required only if service is made by a person other than a Sheriff or a Deputy Sheriff.

\*Fees and mileage need not be tendered to public employees.

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC. and )  
SEMINOLE KRAFT CORPORATION, )

Petitioners, )

vs. )

DEPARTMENT OF ENVIRONMENTAL )  
REGULATION, )

Respondent, )

and )

CITY OF JACKSONVILLE, )  
DEPARTMENT OF COMMUNITY )  
AFFAIRS, PUBLIC SERVICE )  
COMMISSION, ST. JOHNS RIVER )  
WATER MANAGEMENT DISTRICT, )  
JACKSONVILLE ELECTRIC )  
AUTHORITY, CHARLES W. )  
BOSTWICK, WILLIAM C. )  
BOSTWICK, BARNETT BANKS )  
TRUST COMPANY, N.A., IMESON )  
INTERNATIONAL PARK, INC., )  
and INDUSTRIAL PARK )  
DEVELOPMENT CORPORATION, )  
CITIZENS COMMITTEE, INC., )  
SIERRA CLUB, FLORIDA )  
AUDUBON SOCIETY, THE DUVAL )  
AUDUBON SOCIETY, INC. and )  
STAFFORD CAMPBELL, )

Intervenors. )

CASE NO. 88-5740



BEST AVAILABLE COPY

DEPARTMENT OF REGULATORY &  
ENVIRONMENTAL SERVICES  
Air Quality Division



March 11, 1992

Colin J. High, Ph.D.  
Resource Systems Group  
Route 5 South  
P. O. Box 1104  
Norwich, Vermont 05055

RE: SKC's Modeled SO<sub>2</sub> Violations

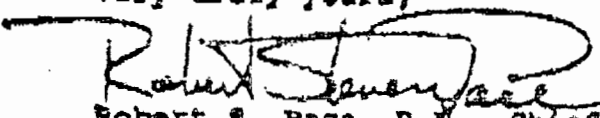
Dear Dr. High:

The City's Air Quality Division (AQD) has determined that the existing Seminole Kraft Corporation facility contributes to a modeled violation of the sulphur dioxide ambient air quality standard in Jacksonville. To remedy this modeled violation, Seminole Kraft has proposed the joint venture with Cedar Bay Cogeneration Project. You have inquired what action AQD would take in the event the cogeneration project is not built and SKC continues to project a modeled SO<sub>2</sub> violation. In such an event AQD would require Seminole Kraft to reduce its emissions to the point that they no longer contribute to a modeled SO<sub>2</sub> violation.

As AQD has previously advised Seminole Kraft and other emission sources similarly situated, there are several remedies available, including, but not limited to, equipment retrofits, fuel changes, and/or reduced operation hours.

If you have any questions concerning AQD's position on this matter, please call me. My telephone number is (904) 630-3666.

Very truly yours,

  
Robert S. Pace, P.E., Chief  
Air Quality Division

cc: File, AQD general correspondence  
SKC file  
Greg Radlinski, Office of General Counsel



ENVIRONMENT

# Power-plant opponents call off their fight against the project

ASSOCIATED PRESS  
JACKSONVILLE

A four-year fight against the Cedar Bay power plant has been called off by a group after the new owners made several environmental concessions.

"If you can't kill the project, then make sure it has less impact on the environment. I think we've done that," Barbara Broward, who has led the group protesting the plant, said Monday.

The decision by opponents to drop their fight apparently clears the way for the \$450-million, 250-

megawatt plant to be completed by next February.

The group ended its fight after confirming the results of a favorable state review of the plant in March that the coal-fired plant had met or exceeded state requirements on pollution, she said.

It also was pleased that U.S. Generating Co. of Bethesda, Md., the new owners, had proposed several favorable changes.

One of the changes is that the Seminole Kraft Co. paper mill will use natural gas to operate three new boilers.

-----Ash-Silo-----0.06-----0.25  
 -----Common-Feed-Hopper-----0.03-----0.13  
 -----Ash-Unloader-----0.01-----0.06

4. The following material-handling-and-treatment-area emission-points shall be controlled by baghouses:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building Dust-Collector  
Coal Silo Conveyor Area-Dust-Collector  
Limestone Pulverizer/Conveyor Dust-Collectors-(2)  
Limestone Storage Bin Hopper-Vent-Filters-(2)  
Limestone-Feeder-Vent-Filters-(6)  
Ash-Silo-Unloaders-(2)  
Bed Ash Hopper Bin-Filter  
Bed Ash Silo-Bag-Filter  
Fly Ash Silo-Bag-Filters-(2)  
Bed Ash Silo Bin Vent  
Fly Ash Silo Bin Vent  
Pelletizing-Bed-Ash-Receiver-Filter-  
Pelletizing-Fly-Ash-Receiver-Filter  
Pelletizing Vibratory Screen Filter  
Pelletizing Ash Recycle Tank Filter  
Pelletizing Recycle Hopper Filter  
Pelletizing Cured Pellet Recycle Conveyor Filter  
Pelletizing-Curing-Silo-Outlet Recycle Conveyor-Dust

D (HP) → Buck  
 3-25-93  
 BR

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by Rule 17-296.711, F.A.C.). Since these sources are RACT standard type, then a one time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

The following material-handling-and-treatment-area sources shall be controlled using wet-dust-suppression-techniques:

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading Wet-Suppression  
Ash Pelletizing Hydrator Venturi-Scrubber  
Ash Pelletizing Curing Silo Impingement-Scrubber  
Ash Pelletizing Pan Impingement-Scrubber

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.02 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Condition II. B.4.a., in accordance with Rule 17-296.711(2)(a), F.A.C. After the one-time PM mass verification tests have been performed, neither DER nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DER or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to a visible emissions and particulate matter mass emissions performance test shall conduct them concurrently, except where inclement weather interferes.

6.7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Estimated Limitations

Pollutant	lbs/hr.	TPY	TPY for 2 dryers
PM/PM <sub>10</sub>	0.25	0.24	0.32
SO <sub>2</sub>	5.00	0.85	2.3
CO	0.60	0.81	1.62
NOx	2.40	3.25	6.5
VOC	0.05	0.06	0.12

Visible emissions from the dryers shall not exceed 5% opacity. ~~If natural gas is used, emissions limits shall be determined by factors contained in AP-42 Table 1-4-1, Industrial-10/86.~~

7.8. The maximum No. 2 fuel oil with maximum sulfur content of .05% by weight firing rate for each limestone dryer

shall not exceed 120 gals/hr., or ~~17,050,000~~ 350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and ~~2,100,000~~ 700,800 gals/year, for the two dryers. ~~The maximum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MMEF per year.~~

**8.9.** Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

**9.10.** Compliance test reports shall be submitted to BRESO within 45 days of test completion in accordance with Rule ~~17-2700(7)~~ 297.570, F.A.C.

**10.11.** Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation (BAR).

#### C. Requirements For the Permittees

1. Beginning one month after certification, ~~AESB~~ CBCP shall submit to BRESO and DER's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

2. The permittees shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the BRESO office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees. **The permittee is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.**

4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.3 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of **three** years to be available for DER and BRESD inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed ~~3.3~~ 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. AESEB USG shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. The permittees shall provide stack sampling facilities as required by Rule 17-2-700(4) 297.345 F.A.C.

9. Prior to commercial operation of each ~~source~~ CFB, the permittees shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(14), F.A.C.

#### D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, upon completion of the initial compliance tests on the AESEB CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. BRESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

Seminole Kraft Corporation may construct natural gas-fired steam boilers at the SK mill provided that emissions from the generation of 375,000 lbs./hr. of steam generated by Seminole Kraft for its own use shall not exceed the following on an annual basis:

Tons Per Year

<u>CO</u>	<b>553</b>
<u>NO</u>	<b>310</b>
<u>SO<sub>2</sub></u>	<b>41</b>

E. Mercury Control Testing

SEMINOLE

KRAFT

## AIR QUALITY IMPACT ANALYSIS

### I. Introduction

The proposed Seminole Kraft package boiler project, as submitted by the applicant, proposed emissions of sulfur dioxide (SO<sub>2</sub>) and beryllium (Be) in PSD significant amounts. The applicant submitted the air quality analysis required by the PSD regulations for these two pollutants. The department's BACT determination for this project substantially restricts the emissions of both pollutants. Re-calculation of the emissions from the proposed project, after the application of BACT shows that all projected emissions of all pollutants are below PSD significant amounts. Therefore, no air quality analysis for this project is required. Although no air quality analysis for this project is required, this evaluation contains the results of the SO<sub>2</sub> air quality analysis submitted by the applicant. Because the permitted emissions of SO<sub>2</sub> due to natural gas firing will be much lower than those projected and modeled by the applicant, the results shown here are conservative and reflect higher impacts



than will be expected to occur as a result of the completion of this project.

The air quality impact analysis required by the PSD regulations for these pollutants includes:

- \* An analysis of existing air quality;
- \* A PSD increment analysis (SO<sub>2</sub>);
- \* An Ambient Air Quality Standards (AAQS) analysis;
- \* An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts; and
- \* A "Good Engineering Practice" (GEP) stack height determination.

The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The PSD increment and AAQS analysis depends on air quality dispersion modeling carried out in accordance with EPA guidelines.

Based on the required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any AAQS or PSD increment. A discussion of the modeling methodology and required analysis follows.

## II. Analysis of Existing Air Quality

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review.

An exemption to the monitoring requirement can be obtained if the maximum air quality impact, as determined by air quality modeling, is less than a pollutant-specific "de minimus" concentration. In addition, if an acceptable ambient monitoring method for the pollutant has not been established by EPA, monitoring is not required.

The maximum 24-hour average SO<sub>2</sub> concentration due to the proposed package boilers is predicted to be 108 ug/m<sup>3</sup>. The de minimus concentration level for SO<sub>2</sub> is 13 ug/m<sup>3</sup>, 24-hour average. Therefore, an ambient monitoring analysis is required for SO<sub>2</sub>.

According to the PSD monitoring guidelines, existing air quality data can be used to satisfy the preconstruction monitoring analysis requirement. An analysis of existing monitors in the area of the project was done. Based on this analysis, the second highest 3-hour and 24-hour and highest annual average SO<sub>2</sub> concentrations measured at the Minerva Street monitor during 1990 were used. These values are used as background SO<sub>2</sub> concentrations to account for SO<sub>2</sub> sources which were not explicitly included in the modeling analysis. The background SO<sub>2</sub> concentrations were

determined to be 68 and 28 ug/m<sup>3</sup> for the 3- and 24-hour averaging periods, respectively, and 5 ug/m<sup>3</sup> for the annual averaging period.

### III. Modeling Methodology

The EPA-approved Industrial Source Complex Short-Term (ISCST2) dispersion model was used to evaluate the pollutant emissions from the proposed facility and other existing major facilities. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST2 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options in each modeling scenario. Direction-specific downwash parameters were used because the stacks were less than the good engineering practice (GEP) stack height.

Initially, for the significant impact analysis, concentrations were predicted at 288 receptors located in a radial grid centered on the proposed stacks for the new

cogeneration units. Receptors were located in "rings", with 36 receptors per ring spaced at 10-degree intervals at distances of 5, 10, 15, 20, 25, 30, 40, and 50 km. For the AAQS and PSD Class II analyses, both near- and far-field receptor grids were used. The near-field screening grid included both regular grid and discrete receptors. The near-field regular (polar) grid included 36 receptors for each 10 degree sector located on the following rings: 1.5, 2.0, 3.0, 4.0, and 5.0 km. Discrete receptors included 36 receptors located on the plant property boundary at 10-degree intervals, plus additional off-property receptors at distances of 0.4, 0.6, 0.8, 1.0, and 1.2 km from the proposed stack to cover the area between the property boundary and the closest regular receptor ring of 1.5 km. The far-field receptor grid included five additional rings of receptors at distances of 7.0, 9.0, 11.0, and 13.0 km. For AAQS screening only, an additional grid was used for distances of 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, and 11.0 km with radial directions of 200, 210, 220, 230, and 240 degrees.

The Okefenokee National Wilderness Area and the Wolf Island National Wilderness Area are two PSD Class I areas that are located within 100 km of the project site. Maximum impacts were predicted at eleven receptors along the southern and eastern edges of these areas.

Meteorological data used in the ISCST2 model to determine air quality impacts consisted of a concurrent 5-year period of hourly

surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) stations at Jacksonville, FL and Waycross, GA. The 5-year period of meteorological data was from 1983 through 1987. The NWS station at Jacksonville, located approximately 12 km to the northwest of project site, was selected for use in the study because it is the closest primary weather station to the study area and is most representative of the plant site. The surface observations included wind direction, wind speed, temperature, cloud cover and cloud ceiling.

Since five years of data were used, the highest-second-high (HSH) short-term predicted concentrations were compared with the appropriate ambient air quality standards or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards.

#### IV. Significant Impact Analysis

The maximum predicted annual, 24-hour, and 3-hour air quality concentrations due to SO<sub>2</sub> emissions from the proposed project only are 6.4, 105, and 428 ug/m<sup>3</sup>, respectively, which are above the respective SO<sub>2</sub> significant impact levels of 1, 5, and 25 ug/m<sup>3</sup>. The distance of the project's significant impact for SO<sub>2</sub> is 15 km. Therefore, a full impact assessment was performed for SO<sub>2</sub>. This analysis also indicated that the maximum impacts due to the proposed package boilers only occurs at the SKC property

boundary.

## V. PSD Increment Analysis

### A. Class II Area

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant. Atmospheric dispersion modeling, as previously described, was performed to quantify the amount of PSD increment consumed. Based on the screening results, a refined modeling analysis was performed for the 24-hour and 3-hour averaging times. The maximum annual average increment consumption was 0.4 ug/m<sup>3</sup>, which is well below the allowable increment of 20 ug/m<sup>3</sup>. The refined modeling results for all increment-consuming sources indicated numerous predicted violations of the 24-hour PSD Class II increment of 91 ug/m<sup>3</sup>. The major contributing facility to these violations is a source other than SKC or Cedar Bay. Further refined modeling shows that SKC and Cedar Bay sources combined do not significantly contribute to any predicted violations of the 24-hour increment. The refined modeling results for all increment-consuming sources for the 3-hour averaging time predicted a maximum increment consumption of 447 ug/m<sup>3</sup>, which is less than the 3-hour PSD Class II increment of 512 ug/m<sup>3</sup>.

### B. Class I Area

A proposed source subject to PSD review must conduct a

dispersion modeling analysis of its impacts on any PSD Class I area located near the source. The maximum predicted annual, 24-hour, and 3-hour increment consumption concentrations at the two Class I areas located near the project site are 0.00, 4.1, 19 ug/m, respectively. These values are less than their respective allowable PSD Class I increments of 2, 5, and 25 km. The proposed project along with other increment consuming sources will therefore meet all allowable PSD Class I increments for the two Class I areas.

#### VI. AAQS Analysis

For the pollutants subject to an AAQS review, the total impact on ambient air is obtained by adding a "background" concentration to the maximum modeled concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. The 1990 monitoring results from the Minerva Street monitor were used to determine the background SO<sub>2</sub> concentrations. Based on screening results, refined modeling was done for all averaging times. The maximum predicted 3-hour concentration, including a background concentration of 68 ug/m<sup>3</sup> was 932 ug/m<sup>3</sup>, which is less than the 3-hour AAQS of 1300 ug/m<sup>3</sup>. However, there were predicted violations of the annual (60 ug/m<sup>3</sup>) and 24-hour (260 ug/m<sup>3</sup>) standards along radials of 210 to 230 degrees and between distances of 5.0 and 11.0 km from the SKC site. This project and the Cedar Bay project are sufficiently linked so that their combined concentration contributions should be compared with

significant impact levels when evaluating contributions to violations. With the applicant's proposed use of 0.5 per cent sulfur fuel oil there is one predicted violation of the 24-hour standard where SKC and Cedar Bay combined contribute significantly to the violation. However, restricting the use of the primary fuel to natural gas and the emergency fuel to fuel oil with a maximum sulfur content of 0.05 per cent for the package boilers lowers emissions substantially and results in modeled values showing no combined contributions which contribute significantly to this predicted violation of the 24-hour standard. SKC and Cedar Bay sources combined do not contribute significantly to any predicted violations of the annual standard. Therefore emissions from the proposed facility are not expected to cause or contribute to a violation of an AAQS.

## VII. Additional Impacts Analysis

### A. Impacts on Soils, Vegetation, and Wildlife

The maximum ground-level concentration predicted to occur for SO<sub>2</sub> as a result of the proposed project, including a background concentration and all other nearby sources, will be below the national secondary standard which was developed to protect public welfare-related values. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area. A thorough air quality related values (AQRV) analysis was done by the applicant for the Class I area. No significant impacts on this area are expected.



## B. Impact on Visibility

Visual Impact Screening and Analysis (VISCREEN), the EPA-approved Level I visibility computer model was used to estimate the impact of proposed project's stack emissions on visibility in the Okefenokee Class I area.

The results indicate that the maximum visibility impacts caused by the facility do not exceed the screening criteria inside or outside the Class I area. As a result, there is no significant impact on visibility predicted for the Class I area.

## C. Growth-Related Air Quality Impacts

No significant growth-related impacts on air quality are expected due to construction and operation of the three package boilers.

## D. GEP Stack Height Determination

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 meters (213 feet) or (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less.

The AES Cedar Bay fluidized bed boiler building, which is under construction, will be the significant structure associated with the proposed project. The building will be 161 feet tall with a resulting GEP stack height of 402 ft. The proposed stack height for this project is 200 ft, which will not exceed the GEP stack height. The potential for downwash of the emissions from

the facility due to the presence of nearby structures was considered in the modeling study.

## AIR QUALITY ANALYSIS FOR THE CEDAR BAY COGENERATION PROJECT

### I. NET AIR QUALITY IMPACTS

#### A. Introduction

The objective of this comparison is to provide data useful for assessing whether applying standard modeling routines, taking into account maximum allowable emissions, indicates that, on balance, the air quality impacts of--

1) the CBCP, as proposed to be modified, and the addition of the three new proposed package boilers scheduled for the SKC site, will be less than the air quality impacts of the CBCP as certified,

2) the CBCP, as proposed to be modified, and the addition of the three new proposed package boilers scheduled for the SKC site necessary to provide 640,000 lb. of steam per hour for SKC's use, will be less than the air quality impacts of the SKC recycling operation without the CBCP, and

3) the CBCP, as proposed to be modified, and the addition of the three new proposed package boilers scheduled for SKC's site, will be less than the air quality impacts of SKC's recycling operation without the CBCP all at their permitted capacities.

In applying this comparison, the differences in air quality impacts based on routine application of atmospheric dispersion modeling taking into account maximum allowable emission rates are compared amongst five cases. These are:

Case 1: the three power boilers and 2 bark boilers operating in their "without the CBCP" mode at a total annualized steam production rate of 640,000 lb/hr, (which corresponds to an annual capacity factor of 85.9 percent),

Case 1a: the 3 power boilers and 2 bark boilers operating in their "without the CBCP" mode at their maximum total annualized steam production rate of 745,000 lb/hr,

Case 2: the CBCP as certified consistent with its emission limitations,

Case 3: the CBCP, as proposed to be modified, generating electricity and supplying a total annualized steam production rate of 380,000 lb/hr to SKC plus the addition of the 3 new package boilers at the SKC recycling operation under two fuel scenarios, fuel oil or natural gas, at a total annualized steam production rate of 260,000 lb/hr, (which corresponds to an annual capacity factor of 69.3%) and

Case 4: the CBCP, as proposed to be modified, consistent with its annual average emission limitations, plus the addition of the 3 new

package boilers at the SKC recycling operation under two fuel scenarios, fuel oil or natural gas, consistent with their proposed annual average emission limitations.

Three assessments are presented:

Assessment A: Case 4 vs. Case 2

Assessment B: Case 3 vs. Case 1

Assessment C: Case 4 vs. Case 1a

## B. Methodology

Air quality impacts were modeled for the five emissions for which their are ambient standards (SO<sub>2</sub>, PM-10, NO<sub>2</sub>, CO, and Pb), and an aggregation of trace pollutants that are emitted by the CBCP and for which most are listed in the Draft Florida Air Toxics Permitting Strategy.

The model selected for this application was EPA's Industrial Source Complex Short Term (ISCST2) model (Version 92062). Meteorological data, required by the model, was taken from surface observations at Jacksonville International Airport and upper air observations at Ware County Airport in Waycross, Georgia, the nearest representative upper air station. It is influenced by the same large scale air masses that would influence the Jacksonville area, climatologically speaking. Data for the years 1983 through 1987 were employed. See ENSR Table 2-1 for the ISCST2 modeling options used.

Ground-level concentration were predicted at 1008 locations input as model receptors. A circular (polar) grid of receptors is represented by the intersection of 36 radials at 10 degree intervals and 28 concentric circles (rings) centered on the CBCP CFB stack location. The ring distances along the radials are specified at the following intervals:

Range (km)	Interval (km)
-----	-----
0.1 to 1.0	0.1
1.0 to 2.0	0.25
2.0 to 5.0	0.5
5.0 to 10.0	1.0
10.0 to 25.0	5.0

The radius of 25 km extends well beyond the distances where maximum impacts were modeled to occur. The receptor grid also included receptors located within the property boundaries of the two facilities. This type of grid is most dense closest to the source origin. A total of 720 of the 1008 receptors are located within 5 km (the significant impact area).

## C. Analysis Results to be Presented

For each Assessment (A, B and C), three comparisons were made. First, the maximum predicted concentrations over all receptors, for each emission modeled, including the substances for which there are ambient standards, and total air toxics for applicable averaging periods, are compared between the cases.

Second, the maximum predicted concentrations for applicable averaging periods are identified at each receptor. For example, for Assessment A, these maximum receptor-specific impacts for the CBCP as certified, Case 2, are subtracted from the maximum receptor-specific impacts of the CBCP with its new emission rates plus the package boilers, Case 4. For any receptor, a positive difference indicates a degradation in air quality, a negative difference indicates an improvement in air quality. The sum of the increases are subtracted from the sum of the absolute values of the decreases. This value is then divided by the total number of receptors (1008) in the receptor grid. If this value is a positive number, then a net air quality improvement is associated with the CBCP and the three package boilers. This approach is consistent with the definition of net air quality improvement in Rule 17-212.500(7) (a), FAC. This rule applies directly to sources in a nonattainment area, but the methodology described by the rule is appropriate for these comparisons. The rule refers to a "uniform" receptor grid that could be construed to refer to a rectangular grid. Even though such a grid has a receptor associated with the same amount of geography, it is not a good option for this case since a 50x50 km rectangular grid would have 97% of its receptors beyond the CBCP's significant impact area. Such an approach would not capture the essence of the comparisons being made. As a result, this study uses a polar grid to assess in detail the geography of most interest in a grid system that is radially "uniform."

Third, ENSR estimated the total number of receptors whose air quality would be improved in the case associated with the modifications proposed for the CBCP.

For Assessment B, the same analysis is performed with the impacts of Case 1 subtracted from the impacts of Case 3. For Assessment C, the same analysis is performed with the impacts of Case 1a subtracted from the impacts of Case 4.

#### D. SKC's and the CBCP's Source Input Data Employed in the Modeling

See Section 2.4 of the ENSR Report for details.

#### E. Findings

##### 1. Assessment A (Case 4 vs. Case 2)

ENSR Table 2-13, with the exception of some short-term averaging times for SO<sub>2</sub> and CO, the maximum predicted impacts of Case 4 are lower than those of Case 2. For SO<sub>2</sub> the maximum predicted impacts for Case 4 are higher for some of the short-term averaging periods

for some of the years modeled. The average net regional SO<sub>2</sub> air quality effect of Case 4, although positive for all averaging periods and years, is not significant, demonstrating a small net improvement with Case 4 over Case 2. For all other substances except CO and annual average PM-10, the average net regional air quality effect of Case 4, although not significant, is also positive.

For CO, the average net air quality effects are negative, with a minority of receptors showing improvement. However, it is important to note that the maximum CO impacts for both cases are much less than Florida's and EPA's Significant Impact Levels (SILs) for 1 hour CO and 8-hour CO concentrations.

For annual average PM-10 concentrations, although the maximum concentrations are lower, the net air quality effect on a regional basis is negative. The average net effects are much less than the annual PM-10 SIL. Thus, the net effect is insignificant.

ENSR Table 2-14 displays the findings for Assessment A for SKC's package boilers firing natural gas. Results are shown for CO and NO<sub>2</sub> only, since these are the only emissions that increase in Case 4, due to the package boilers firing natural gas. For CO, the same conclusions can be drawn as in the oil-firing case. Impacts, although higher for Case 4, are insignificant. For Case 4, NO<sub>2</sub> maximum impacts are again lower than Case 2, and a positive, although insignificant, average net air quality benefit is demonstrated.

On balance, the air quality impacts of the CBCP in terms of maximum impacts, as proposed to be modified, and the addition of any boilers on the SKC site at their permitted capacity will be less than the air quality impacts of the CBCP as certified, although net regional differences are small.

## 2. Assessment B (Case 3 vs. Case 1)

ENSR Tables 2-15 and 2-16 indicate that the regional net air quality effect of Case 3 is positive, although not significant for all pollutants and averaging periods, indicating an average small net benefit to air quality over the entire model receptor grid with the CBCP.

On balance, the air quality impacts of the CBCP, as proposed to be modified, and the addition of the three proposed boilers on SKC's site necessary to provide 640,000 lb. of steam per hour for SKC's use will be less than the air quality impacts of SKC's future recycling operation using SKC's existing boilers without the CBCP.

## 3. Assessment C (Case 4 vs. Case 1a)

ENSR Tables 2-17 and 2-18 indicate that the net air quality effect of Case 4 is positive for each emission and averaging period, although not significant for some pollutants, indicating an average

net benefit to the air quality.

On balance, the air quality impacts of the CBCP, as proposed to be modified, and the addition of the boilers on the SKC site at their maximum allowable emission rates will be less than the air quality impacts of the maximum allowable emissions of SKC's recycling operation with power and bark boilers.

## II. Ambient Air Quality Standards (AAQS) Analysis

The results of the modeling for the CBCP alone, as proposed to be modified, are presented in ENSR Tables 3-24 through 3-28 for the pollutants CO, NO<sub>2</sub>, PM-10, Pb, and SO<sub>2</sub>. Each table lists the maximum predicted impact of the CBCP for each applicable AAQS. The significant impact level (SIL) is also listed for the applicable pollutant. The predicted impacts for CO are below the SILs. Therefore, CO was eliminated from further consideration, since the CBCP can neither cause nor contribute to an AAQS violation for CO. Lead concentrations were also found to be insignificant.

The remaining pollutants (PM-10, NO<sub>2</sub> and SO<sub>2</sub>), were modeled for the CBCP, SKC's package boiler and all the other existing and permitted sources for each pollutant in the area. Monitored background concentrations for each pollutant were added to the model's predicted concentrations to obtain the total concentration, which was compared to the respective AAQS (ENSR Tables 3-29 through 3-31).

Based on this analysis, it can be concluded that the CBCP, as proposed to be modified, would neither cause nor contribute to a violation of the respective PM-10, NO<sub>2</sub>, or SO<sub>2</sub> AAQs.

The CBCP also emits volatile organic compounds (VOC), which can be precursors to ozone formation. However, no single source modeling can sufficiently characterize that source's impact on the photochemical process and ozone concentrations, which are regional phenomena. Accordingly, no single source modeling is required by either EPA or DER. However, since the VOC emissions of the CBCP will be more than offset by shutdown of the SKC Power and Bark Boilers, no significant impact on ozone concentrations from the CBCP is expected.

## III. PSD Class I and II Increment Compliance Analyses

The results of the maximum predicted SO<sub>2</sub> Class I and Class II increment consumed by the CBCP itself are presented in ENSR Table 3-32. The maximum SO<sub>2</sub> impacts of the CBCP by itself exceed neither the Class I nor Class II allowable increments.

An analysis was performed to identify the maximum total Class II increment consumption by all PSD increment consuming and expanding sources (including SKC's package boilers as increment consuming

sources) to which the CBCP would contribute to the Class II SILs. The results of this analysis are summarized in ENSR Table 3-33. As shown in this table, none of the total concentrations exceed the Class II PSD increments, where the CBCP has a significant impact. Thus, it can be concluded that the CBCP, as proposed to be modified, would neither cause nor contribute to a violation of the PSD Class II SO2 increments.

For the Class I area, the total SO2 increment consumption due to all increment consuming and expanding sources was identified for each averaging period, modeled year and Class I area (Wolf Island Wilderness Area and Okefenokee Wilderness Area) (ENSR Table 3-34). Based on these results, it can be concluded that the CBCP, as proposed to be modified, would neither cause nor contribute to a violation of the Class I SO2 increments.

A similar analysis was performed for Total Suspended Particulates (TSP). The results of this analysis are contained in ENSR Tables 3-35 through 3-37. None of the total concentrations exceed the Class I or Class II PSD TSP increments. Thus, it can be concluded that the CBCP, as proposed to be modified, would neither cause nor contribute to a violation of the PSD Class I or Class II TSP increments.

A similar analysis was performed for NO2. The results of this analysis are contained in ENSR Tables 3-38 through 3-40. None of the total concentrations exceed the Class I or Class II PSD NO2 increments. Thus, it can be concluded that the CBCP, as proposed to be modified, would neither cause nor contribute to a violation of the PSD Class I or Class II NO2 increments.

#### IV. Draft Air Toxics No Threat Levels (NTL) Evaluation

The air toxics emissions from the CBCP, by itself, as proposed to be modified, were modeled to determine the maximum impact of each pollutant for each averaging period for which a draft NTL has been proposed. The results are summarized in ENSR Table 3-41. In each case the impacts are below the draft No Threat Levels.

#### V. Additional Analyses

##### A. Impact of Secondary Emissions Associated with any Residential, Commercial, or Industrial Growth Directly Related to the Construction or Operation of the CBCP

No significant adverse air quality impacts are expected from secondary emissions associated with the construction or operation of the CBCP. See ENSR Report Section 5.1 for details.

##### B. Impacts of the CBCP on Soils and Vegetation

Comparisons were made of the combined impacts of the CBCP and SKC's package boilers with those of SKC's existing power and bark boilers



in future recycle operation. Those comparisons clearly showed that there would be a net regional improvement in maximum concentrations of SO<sub>2</sub>, NO<sub>2</sub> and CO. Since SKC's power and bark boilers are to be retired when the CBCP begins operation, it can be concluded that the impacts (if any) of these substances on vegetation will be decreased. See ENSR Report Section 5.2 for details.

#### C. Visibility Assessment

The emissions from the proposed facility were shown to have an insignificant impact on visibility at both the Okefenokee and Wolf Island Class I areas. The potential for a visible plume from the CBCP is expected to be localized (within 5 km) and occur only under light wind, neutral dispersion conditions which occur primarily during early daylight hours. See ENSR Report Section 5.3 for details.

#### D. CBCP Cooling Tower Impact Analysis

This section presents two analyses: the potential for fogging or icing conditions on nearby routes to be caused by the CBCP's cooling towers and salt deposition rates due to cooling tower operations. ENSR's analysis indicates that, based on the low probabilities predicted by the SACTI model, the visibility reduction due to the CBCP's cooling tower is not expected to pose a threat to local transportation routes. The effects of salt deposition on local vegetation is not expected to be significant. See ENSR Report Section 5.4 for details.

#### E. Screening Modeling Analysis for Low Load CFB Operation

A screening modeling analysis was conducted to compare four operating scenarios for the CBCP's CFBs as presented in ENSR Table 5-23. The purpose of this analysis is to evaluate the potential for lower load operation to result in higher total ambient CBCP impacts than maximum load. The loads modeled were 100%, 67%, 40%, and 17%.

The results of the ISC modeling analysis for each meteorological condition and load case are presented in ENSR Table 5-25. From this table, it is seen that maximum normalized concentrations predicted for each meteorological condition are generally (25 of 33 meteorological conditions analyzed or 76%) associated with the 100% load case.

Since ENSR Table 5-25 shows that the low-load operation of the CBCP's CFBs would not increase the impact of the CFBs within 0.8 km, well beyond the location of the CBCP's peak effect on ambient air quality, it is clear that the low-load operation would not affect the estimation of that peak effect. Therefore, lower loads do not warrant additional analyses as they have no bearing on modeling results for critical parameters. See ENSR Report Section 5.5 for details.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION  
 AES CEDAR BAY, INC./SEMINOLE KRAFT CORP.  
 CEDAR BAY COGENERATION PROJECT  
 PA 88-24A

CONDITIONS OF CERTIFICATION

When a condition is intended to refer to both AES-Cedar Bay, Inc. or Cedar Bay Cogeneration, Inc. and Seminole Kraft Corp.; the term "~~Cedar-Bay-Cogeneration-Project~~" or the abbreviation "~~CBCP~~" or the term "CDC/SK" or "permittees" will be used. When a condition is intended to refer to the "Cedar Bay Cogeneration Project" the terms "Cedar Bay Cogeneration Project", "CBCP", or "Project" will be used.

Where a condition applies only to AES Cedar Bay Cogeneration, Inc. or the term "AES Cedar Bay Cogeneration, Inc." (CDC) or the abbreviation "AESCB" ""CBCP" or the term "permittee," where it is clear that AESCB "CBCP" is the intended responsible party, will be used. Similarly, where a condition applies only to Seminole Kraft Corp., the term "Seminole Kraft Corp." or the abbreviation "SK" or the term "permittee," where it is clear that SK is the intended responsible party, will be used. The Department of Environmental Regulation may be referred to as DER or the Department. BESB RESD represents the City of Jacksonville, Bio-Environmental Regulatory and Environmental Services Division Department. SJRWMD represents the St. Johns River Water Management District.

I. GENERAL

The construction and operation of CBCP shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters ~~17-27~~, 17-210 through 17-297, 17-302, 17-4, 17-5276, 17-601, 17-702, 17-312, 17-21532, 17-22550, 17-555, 17-25, and 17-610, 17-660, and 17-772, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

II. AIR

The construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, AESCB CBCP shall comply with the following conditions of certification as indicated.

A. Emission Limitations for AES CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

- a. The maximum coal charging rate of each CFB

shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

b. ~~The maximum wood waste (primarily bark) charging rate to the No. 1 and No. 2 CFBs each shall neither exceed 15,653 lbs/hr., nor 63,760 TPY. This reflects a combined total of 31,306 lbs/hr. and 127,521 TPY for the No. 1 and No. 2 CFBs. The No. 3 CFB will not utilize wood waste, nor will it be equipped with wood waste handling and firing equipment. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the SK recycling process shall not exceed 210 yd<sup>3</sup>/day wet, 69,588 yd<sup>3</sup>/yr wet, 150 dry TPD, 54,750 dry TPY. This reflects a combined total of 420 yd<sup>3</sup>/day wet and 139,176 yd<sup>3</sup>/yr wet, 300 dry TPD, and 108,500 dry TPY for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.~~

c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.

d. The sulfur content of the coal shall not exceed ~~1.7%~~ 1.2% by weight on an annual basis. The sulfur content shall not exceed ~~3.3%~~ 1.7% by weight on a shipment (train load) basis.

e. Auxiliary fuel burners shall be fueled only with ~~natural gas or~~ No. 2 fuel oil with a maximum sulfur content of ~~0.3%~~ 0.05% by weight. The fuel oil ~~or natural gas~~ shall normally only be used only for startups. During the first year of commercial operation the maximum annual oil usage shall not exceed 350,000 1,900,000 gals./year, the maximum annual oil usage shall not exceed 160,000 gals/year, nor shall the maximum annual natural gas usage exceed 22.4 MMCF per year. The maximum heat input from the fuel oil ~~or gas~~ shall not exceed ~~1120~~ 380 MMBtu/hr. for each the CFBs.

f. The CFBs shall be fueled only with the fuels permitted in Conditions 1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to condition XXI, Modification of Conditions.

g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed 25.98 x 10<sup>6</sup> MMBtu/yr total annual heat input.

h. To the extent that it is consistent with Condition II.A.1.b. and the following, CBCP shall burn all of the short fiber rejects generated by Seminole Kraft in processing recycled paper. No less than ninety (90) days prior

to completion of construction, shall submit a plan to DER for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DER and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DER and to the RESD within forty-five (45) days of completion of the test burn. DER shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this Condition of Certification.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.

b. Baghouse, for control of particulate matter.

c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DER, RESD, and EPRI, CDC shall submit a mercury control test protocol to DER for approval by December 1, 1993. Results of the test shall be submitted to the DER within 90 days of completion.

d. Selective Non-catalytic Reduction (SNCR) for control of NOx

e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

3. Flue gas emissions from each CFB shall not exceed the following:

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr.	TPY	TPY for 3 CFBs
CO	0.19	202	823	2468
NOx	0.29	308.3	1256	3767
SO <sub>2</sub>	0.60 (3-hr-avg.)	637.8	--	--
	0.31	329.5	1338	4015
VOC	0.015	16.0	65	195
PM	0.020	21.3	87	260
PM <sub>10</sub>	0.020	21.3	86	257
H <sub>2</sub> SO <sub>4</sub> -mist	0.024	25.5	103	308
Fluorides	0.086	91.4	374	1122
Lead	0.007	7.4	30	91
Mercury	0.00026	0.276	1.13	3.4
Beryllium	0.00011	0.117	0.5	1.5

Note:--TPY represents a 93% capacity factor.--MRA refers to a twelve-month rolling average.

Pollutant	lbs/MMBtu	Emission Limitations		
		lbs/hr.	TPY	TPY for 3 CFBs
CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758	2273
NOx	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--	--
	0.20 <sup>4</sup>		866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> SO <sub>4</sub> mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.027	0.4	0.11

[Note: TPY represents a 93% capacity factor.]

- 1 Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour standard applies.
- 2 Thirty-day rolling average.
- 3 Three-hour rolling average.
- 4 Twelve-Month rolling average (MRA).

4. Ammonia (NH<sub>3</sub>) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

~~4-~~ 5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity pursuant to 40 CFR 60.42a.

~~5-~~ 6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1991 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. 7 of this permit or by equivalent methods after prior written DER approval.

~~6-~~ 7. The CFBS are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.

~~7-~~ 8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOX, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H<sub>2</sub>SO<sub>4</sub> mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).

b. Annual compliance tests shall be performed for PM, CO, SO<sub>2</sub> and NOX, commencing no later than 12 months from the initial test.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate of for each permitted fuel.

e. The following test methods and procedures of Rule 17-297, F.A.C., and 40 CFR Parts 60 and 61 or other DER approved methods with prior DER approval, in writing, shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O<sub>2</sub> and CO<sub>2</sub>.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.

- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- ~~(14)~~ (14) Method 18 or 25A for VOCs.
- ~~(15)~~ (15) Method 101A or EPA Method 29 for mercury.
- ~~(16)~~ (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM10 emissions.
- ~~(18)~~ Method      for NH<sub>3</sub>. \*\*\*\*

8. 9. Continuous Emission Monitoring for each CFB

~~AESEB CBCP shall use-Continuous-Emission-Monitoring-Systems-(CEMS) to-determine-compliance.--CEMS install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> or CO<sub>2</sub>, shall-be-installed, calibrated,--maintained-and-operated-for-each-unit,--in-accordance with-40-CFR-60-47a-pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DER in writing and in accordance with state and federal regulations.~~

~~a.--Each-continuous-emission-monitoring-system (CEMS)-shall-meet-performance-specifications-of-40-CFR-60,--Appendix B-~~

ba. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and

60.7. A record shall be kept for periods of startup, shutdown and malfunction.

eb. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

dc. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

ed. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

fe. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. ~~10~~ 11 herein, which exceeds the applicable emission limit in Condition No. 3.

f. The permittee is subject to all applicable provisions of Rule 17-4.130, Plant Operation-Problems.

~~9~~ 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

~~b.--The furnace heat load shall be maintained between 70% and 100% of the design-rated capacity during normal operations.~~

~~b.e.~~ The coal, rejects, bark, natural gas and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

~~10~~ 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to DER's N.E. District office and to the BRESD (~~Bio-Environmental Services Division~~) office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the BRESD office within 45 days after completion of the last test run.



c. The owner or operator shall submit excess emission reports to BRESO, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measure adopted (40 CFR 60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(d)(e)).

d. Annual and quarterly reports shall be submitted to BRESO as per ~~F.A.C. Rule 17-2-700(7)~~ 297.500, F.A.C.

~~11-12.~~ 12. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to ~~F.A.C. Rule 17-212.200, F.A.C.~~, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation.

13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.

14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.

15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.

16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

B. AES CBCP - Material Handling and Treatment

1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 14 hours per day (maximum of 2920 hrs/yr) at maximum capacity.

2. The material handling/usage rates for coal, limestone, fly ash, and bed ash shall not exceed the following:

<u>Material</u>	<u>Handling/Usage Rate</u>	
	<u>TPM</u>	<u>TPY</u>
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., ~~2,100,000~~ and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., ~~160,000~~ and 1,900,000 gals/year for the three boilers are not expected to be significant.

~~4.--The maximum emissions from the material handling and treatment area, where baghouses are used as controls for specific sources, shall not exceed those listed below (based on AP-42 factors):~~

<u>Source</u>	<u>-Particulate Emissions-</u>	
	<u>lbs/hr.</u>	<u>TPY</u>
<del>Coal-Rail-Unloading</del>	<del>neg</del>	<del>neg</del>
<del>Coal-Belt-Feeder</del>	<del>neg</del>	<del>neg</del>
<del>Coal-Crusher</del>	<del>0.41</del>	<del>1.78</del>
<del>Coal-Belt-Transfer</del>	<del>neg</del>	<del>neg</del>
<del>Coal-Silo</del>	<del>neg</del>	<del>neg</del>
<del>Limestone-Crusher</del>	<del>0.06</del>	<del>0.28</del>
<del>Limestone-Hopper</del>	<del>0.01</del>	<del>0.03</del>
<del>Fly-Ash-Bin</del>	<del>0.02</del>	<del>0.10</del>
<del>Bed-Ash-Hopper</del>	<del>0.06</del>	<del>0.25</del>
<del>Ash-Silo</del>	<del>0.06</del>	<del>0.25</del>
<del>Common-Feed-Hopper</del>	<del>0.03</del>	<del>0.13</del>
<del>Ash-Unloader</del>	<del>0.01</del>	<del>0.06</del>

4. Material handling sources shall be regulated as follows:

a. The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building  
Coal Silo Conveyor  
Limestone Pulverizer/Conveyor  
Limestone Storage Bin  
Bed Ash Hopper  
Bed Ash Silo  
Fly Ash Silo  
Bed Ash Bin  
Fly Ash Bin  
Pellet Vibratory Screen  
Pelletizing Ash Recycle Tank  
Pelletizing Recycle Hopper  
Cured Pellet Recycle Conveyor  
Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

b. The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading  
Ash Pellet Hydrator  
Ash Pellet Curing Silo  
Ash Pelletizing Pan

~~The emissions from the above listed sources and the limestone dryers are subject to the particulate emission limitation requirement of 0.03 gr/dscf. However, neither DER nor BRESB will require particulate tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DER or BRESB, based on other information, has reason to believe the particulate emission limits are being violated.~~

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.02 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area listed in Condition II. B.4.a., in accordance with Rule 17-296.711(2)(a),

F.A.C. After the one-time PM mass verification tests have been performed, neither DER nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DER or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.

6.7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

Pollutant	Estimated Limitations				
	lbs/hr.	TPY	TPY for 2 dryers		
PM/PM <sub>10</sub>	<del>0.25</del> 0.24	<del>1.1</del> 0.32	<del>2.2</del> 0.64		
SO <sub>2</sub>	<del>5.00</del> 0.85	<del>21.9</del> 1.15	<del>43.8</del> 2.3		
CO	0.60	<del>2.6</del> 0.81	5.2	1.62	
NO <sub>x</sub>	2.40	<del>10.5</del> 3.25	<del>21.0</del> 6.5		
VOC	0.05	<del>0.2</del> 0.06	<del>0.4</del> 0.12		

Visible emissions from the dryers shall not exceed 5% opacity. ~~If natural gas is used, emissions limits shall be determined by factors contained in AP-42 Table 1-4-1, Industrial 10/86.~~

7.8. The maximum No. 2 fuel oil with maximum sulfur content of .05% by weight firing rate for each limestone dryer shall not exceed 120 gals/hr., or ~~1,050,000~~ 350,400 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr., and ~~2,100,000~~ 700,800 gals/year, for the two dryers. ~~The maximum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MCF per year.~~

8.9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

9.10. Compliance test reports shall be submitted to BRESO within 45 days of test completion in accordance with Rule ~~17-2700(7)~~ 297.570 of the F.A.C.

10.11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation (BAR).

C. Requirements For the Permittees

1. Beginning one month after certification, AESEB CBCP shall submit to BRESO and DER's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase

of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.

2. The permittees shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the BRESO office.

3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees. The permittee is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.

4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.

5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.3 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of three years to be available for DER and BRESO inspection.

6. Coal fired in the CFBs shall have a sulfur content not to exceed ~~3.3~~ 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

7. AESOB CDC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.

8. The permittees shall provide stack sampling facilities as required by Rule ~~17-2-700(4)~~ 297.345 F.A.C.

9. Prior to commercial operation of each source CFB, the permittees shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

10. All records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the AESEB CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. BRESO shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

E. SK Steam Boiler Emissions

This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, Florida Statutes, shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr of steam for use in its recycled paper process:

Tons Per Year

CO	<del>553</del>	552.6
NO <sub>x</sub>	<del>310</del>	318.2
SO <sub>2</sub>	<del>7.5</del>	A

This emissions ceiling shall operate as a joint and individual requirement to assure common control for the purpose of ensuring that all commitments relied on are in fact fulfilled.

### III. WATER DISCHARGES

Any discharges into any waters of the State during construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-301, 17-302 and 17-660, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, AESEB CBCP shall comply with the following conditions of certification:

#### A. Plant Effluents and Receiving Body of Water

For discharges made from the AESEB CBCP power plant site the following conditions shall apply:

1. CBCP shall not discharge any cooling system, demineralizer regeneration, floor drainage or other process wastewaters from the operation of the CBCP facility into any waters of the State. CBCP shall install a closed-loop cooling water system in accordance with technical specifications set forth in the Zero Discharge System Plan submitted by CBCP to the Department.

2. Pursuant to the Zero Discharge Plan, CBCP shall make available to Seminole Kraft up to 500 gpm of reclaimed water that has been treated to a quality satisfactory for use in Seminole Kraft's cooling tower.

3. Receiving Body of Water (RBW) - The receiving bodies of water for storm water discharges has have been determined by the Department to be those waters of the St. John's River (during construction only) or the Broward River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes (F.S.).

4. Point of Discharge (POD) - The point of discharge has been determined by the Department to be where the storm water effluent physically enters the waters of the State in the St. John's River (during construction) via Outfall OSN 001 and Broward River (during construction and operation) via Outfall OSN 003 and OSN 008. via-the-SKE-discharge-outfall-001, which-is-the-existing main-outfall-from-the-paper-mill-emergency-overflow-to-the-Broward River-via-outfall-003.

3. Thermal-Mixing-Zones---The-instantaneous-zone-of thermal-mixing-for-the-AESEB-cooling-system-shall-not-exceed-an area-of-0.25-acres---The-temperature-at-the-point-of-discharge-into-the-St.-John's-River-shall-not-be-greater-than-95-degrees-F. The-temperature-of-the-water-at-the-edge-of-the-mixing-zone-shall not-exceed-the-limitations-of-Section-17-3.05(1)(d), F.A.C.- Cooling-tower-blowdown-shall-not-exceed-95°-F-as-a-24-hour-average, nor-96°-F-as-an-instantaneous-maximum.

4.5. Chemical Wastes from AESEB CBCP - All discharges of low volume wastes (demineralizer regeneration, floor drainage,

labs drains, and similar wastes) and chemical metal cleaning wastes shall be collected and treated in the the zero discharge treatment system. ~~comply with Chapter 17-6, F.A.C. at OSN-006 and 007 respectively. If violations of Chapter 17-6 F.A.C. occur, corrective action shall be taken by AESCB. These wastewaters shall be directed to an adequately sized and constructed treatment facility.~~

5- pH---~~The pH of the combined discharges shall be such that the pH will fall within the range of 6.0 to 9.0 at the POD to the St. Johns River and shall not exceed 6.5 to 8.5 at the boundary of a 0.25-acre mixing zone.~~

6- Polychlorinated-Biphenyl-Compounds---~~There shall be no discharge of Polychlorinated-biphenyl compounds.~~

7- Cooling-Tower-Blowdown---~~AESCB's discharge from Outfall-Serial-Number-002---Cooling-Tower-Blowdown shall be limited and monitored as specified below:~~

Parameter	Discharge-Limit	Monitoring Frequency	Requirement Type
Discharge-Flow-(mgd)	Report	1/day	Totalizer
Discharge-Temp--(°F)	Instantaneous Maximum	Continuous	Recorder
Total-Residual-Oxidants	Instantaneous Maximum--0.5-mg/l	Continuous	Recorder
Time-of-Total-Residual-Oxidant-Discharge-(TPOD)	120-minutes per-day	Continuous	Recorder
Iron -----	Instantaneous Maximum-0.5-mg/l	1/week	grab
pH	6---9	1/week	-grab

~~b---There shall be no detectable discharge of the 125-priority pollutants contained in chemicals added for cooling-tower-maintenance. Notice of any proposed use of compounds containing priority pollutants shall be made to the DER-Northeast-District-Office not later than 180-days prior to proposed use.~~

~~c---Samples taken in compliance with the monitoring requirements specified above shall be taken at OSN 002 prior to mixing with any other waste stream.~~



d- 6. Seminole Kraft Corporation (SKC) shall shut down the mill's once through cooling system within 10 days after written notification by DER of the successful completion of the initial compliance tests on the AESEB CBCP boilers conducted pursuant to Condition II.A.7. SKC shall inform the DER Northeast District Office of the shutdown and surrender all applicable operating permits for that facility within 21 days of such notification.

8. --- Combined-Low-Volume-Wastes-shall-be-monitored-at-OSN 006-with-weekly-grab-samples. --- Discharge-limitations-are-as follows:

	Daily-Max	Daily-Avg
Oil-and-Grease	20.0-mg/l-	--15.0
Copper-dissolved-	-1.0-mg/l*	--N/A
Iron-dissolved	-1.0-mg/l*	--N/A
Flow	Report	--N/A
Heavy-Metals	Report-(See-Below)	

a. --- The-pH-of-the-discharge-shall-not-be-less than-7.0\*-standard-units-and-shall-be-monitored-once-per-shift, unless-more-frequent-monitoring-is-necessary-to-quantify-types of-nonchemical-metal-cleaning-waste-discharged.

b. --- Serial-number-assigned-for-identification and-monitoring-purposes. --- Heavy-metal-analyses-shall-include total-copper, iron, nickel, selenium, and-zinc. --- \*Limits applicable-only-to-periods-in-which-nonchemical-metal-cleaning waste-is-being-discharged-via-this-OSN. --- Length-of-composite samples-shall-be-during-the-periods-(s)-of-nonchemical-metal cleaning-waste-generation-and-discharge-and-shall-be-adequate to-quantify-differences-in-sources-of-waste-generated-(air preheater-vs.-boiler-fireside,-etc.).

9. --- Chemical-Metal-Cleaning

AESEB's-discharge-from-outfall-serial-number-007-- metal-cleaning-wastes-discharged-to-the-Seminole-Kraft treatment-system. --- Such-discharges-shall-be-limited-and monitored-by-the-permittee-as-specified-below:

a-

Effluent Characteristic	Discharge-Limits		Monitoring Requirements
	Instantaneous Max	Measurement Frequency	Sample Type
Flow---m <sup>3</sup> /day-(MGD)	-	1/batch	Pump-log

Copper, Total	1.0-mg/l	1/	grab
Iron, Total	1.0-mg/l	1/	grab
Batches	Report	1/batch	logs

~~b. -- Chemical-metal-cleaning-wastes-shall-mean process-equipment-cleaning-including, but-not-limited-to, boiler-tube-cleaning.~~

~~e. -- Waste-treated-and-discharged-via-this-OSN shall-not-include-any-stream-for-which-an-effluent-guideline has-not-been-established-(40-CFR-Part-423)-for-total-copper-and total-iron-at-the-above-levels.~~

~~d. -- Samples-taken-in-compliance-with-the monitoring-requirements-specified-above-shall-be-taken-at-the discharge-from-the-metal-cleaning-waste-treatment-facility(s) prior-to-mixing-with-any-other-waste-stream.~~

10. 7.a. Storm Water Runoff - During construction and operation there shall be no discharges from the stormwater basins for storms less than the ten-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in ten year, twenty-four hour storm shall meet the following limits and shall be monitored at OSN 003 by a grab sample once per discharge, but not more often than once per week:

Effluent Characteristic	Discharge Limits	
	Instantaneous Maximum	Report
Flow (MGD)		
TSS (mg/l)		50
pH		6.0-9.0

All applicable discharge limitations, described in Part I of the NPDES permit (FL0041173) for stormwater discharges during the period of construction from this facility, shall apply under this permit and be reported to the Department as part of the Monthly Operation Report.

~~b. Any-underdrains-must-be-checked-annually-and measures-must-be-taken-to-insure-that-the-underdrain-operates as-designed. -- Permittees-will-have-to-modify-the-underdrain system-should-maintenance-measures-be-insufficient-to-achieve operation-of-the-underdrains-as-designed. -- AES-Cedar-Bay-must back-flush-the-exfiltration/underdrain-system-at-least-once during-the-first-six-months-of-calendar-each-year. -- These backflushings-must-occur-no-closer-than-four-calendar-months from-each-other. -- In-advance-of-backflushing-the exfiltration/underdrain-systems, the-permittees-must-notify BRESB-and-SJRWMD-of-the-date-and-time-of-the-backflushing.~~

a- b.1. Yard Area Runoff - During normal plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods ~~less~~ greater than the ~~10~~25-year, 24-hour rainfall. During periods of operation when the CBCP is off-line, these necessary measures, as specified above, shall be used during rainfall periods greater than a 10-year, 24-hour storm. [The discharge shall comply with all the monitoring requirements for Yard Area Runoff specified in Part I of the NPDES permit for this facility.]

b.2. Storage Area Runoff - [The discharge shall comply with all the monitoring requirements for the Coal, Limestone, and Ash Storage Area specified in Part I of the NPDES permit for this facility.]

c. Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt, and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 in the discharge to the St. Johns River and 6.5 to 8.5 in the Broward River.

d. Special consideration must be given to the control of sediment laden runoff resulting from storm events during the construction phase. Best management practices erosion controls should be installed early during the construction period so as to prevent the transport of sediment into surface waters which could result in water quality violations and Departmental enforcement action. Revegetation and stabilization of disturbed areas should be accomplished as soon as possible to reduce the potential for further soil erosion. Should construction phase runoff pose a threat to the water quality of state waters, additional measures such as treatment of impounded runoff ~~of~~ or by the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.

e. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17-25.027, F.A.C.

f. Correctional action or modification of the system will be necessary should mosquito problems occur.

g. AES-Cedar-Bay CBCP shall submit to DER with copy to BRESD and the SJRWMD, erosion control plans for the entire construction project (or discrete phrases of the project) detailing measures to be taken to prevent the offsite discharge of turbid waters during construction. These plans must also be provided to the construction contractor prior to the initiation of construction.

h. All swale and retention basin side slopes shall be seeded and mulched or sodded within thirty days following their completion and a substantial vegetative cover must be established within ninety days of seeding.

11- Boiler-Blowdown-

Discharge-from-boiler-blowdown-to-the-cooling-tower from-outfall-serial-Number-004-shall-be-limited-and-monitored as-specified-below:

Effluent Characteristic	Discharge-Limits		Monitoring Requirements
	Daily Maximum	Sample Type	Measurement Frequency
TSS	30.0	grab	1/Quarter
Oil-and-Grease	15.0	grab	1/Quarter
Flow	-	Calculation	1/Month

12- Construction-Dewatering-

a.--Discharge-of-construction-dewatering-to-the-SKE once-through-cooling-system-from-outfall-serial-number-005 shall-be-limited-and-monitored-as-specified-below:

Effluent Characteristic	Discharge Limits	Monitoring Requirements	
		Measurement Frequency	Sample Type
Flow---(MGD)	288	daily	Totalizer
Turbidity-(NTU)	29	1/week-composite	grab
Aluminum-mg/l	1.5	1/week-composite	grab
Copper-mg/l	0.015	1/week-composite	grab
Iron-mg/l	0.3	1/week-composite	grab
Lead-mg/l	0.05	1/week-composite	grab
Mercury-ug/l	0.1	1/week-composite	grab
Phenol-ug/l	1.0	1/week-composite	grab
TSS-mg/l	50.0	1/week-composite	grab
pH	6.0-9.0	1/week-composite	grab

Report-N.D.-if-below-detection-limit,-giving-method-used-and detection-limit.--If-the-discharge-limit-is-below-the-detection limit,-then-N.D.-signifies-compliance.

AES/CB-shall-take-composite-samples-of-dewatering-effluent-once a-week-for-one-month-following-the-start-of-dewatering,-then-if no-violations-are-found,-grab-samples-may-be-taken-for-the remainder-of-dewatering.

AES-Cedar-Bay-shall-treat-the-construction-dewatering-discharge so-as-not-to-exceed-the-above-effluent-limits.--AES/CB-shall

utilize the advanced treatment systems consisting of sand filter, carbon filter, and selective ion exchange, as shown in their letter of October 26, 1990, to Hamilton S. Owen, unless testing demonstrates that the above limits can be met without such treatment. Prior to discontinuing such treatment, AES/EB shall notify both DER and BESD, and provide them with an opportunity for consultation.

AES Cedar Bay shall do sufficient bench testing to demonstrate that it can meet the above limit for copper. AES Cedar Bay shall notify DER and BESD of the bench testing, and allow DER and BESD to be present if they so desire to observe the bench testing.

In addition, AES Cedar Bay shall determine the amount of treatment and removal provided for iron, aluminum and lead by the method of treatment selected for copper.

A report shall be submitted to DER and BESD summarizing the results of the bench testing of the proposed treatment technique.

b. Project discharge descriptions--  
Dewatering water, outfall 005, includes all surficial groundwater extracted during all excavation construction on site for the purpose of installing structures, equipment, etc. discharges to the SKC once through cooling water system at a location to be depicted on an appropriate engineering drawing to be submitted to DER and BESD. Final discharge after treatment is to the St. Johns River. The permittee shall report to BESD the date that construction dewatering is expected to begin at least one week prior to the commencement of dewatering.

13. Mixing Zones--The discharge of the following pollutants shall not violate the Water Quality Standards of Chapter 17-37, F.A.C., beyond the edge of the designated instantaneous mixing zones as described herein. Such mixing zones shall apply when the St. Johns River is in compliance with the applicable water quality standard. The permittee shall report the date construction dewatering commences to the BESD.

a. During operation of CBEP for the life of the facility:

Iron-----125,600-m<sup>2</sup>-(31-acre)-mixing-zone  
Chlorine--0---not-measurable-in-river  
Temp.-----1,013-m<sup>2</sup>-(0.25-acre)  
pH-----1,013-m<sup>2</sup>-(0.25-acre)

14. Variance to Water Quality Standards  
--In accordance with the provisions of Sections 403.201 and 403.511(2), F.S., permittees are hereby granted a variance to

~~the water Quality Standard of Chapter 17-3-121, F.A.C. for iron during operation.~~

~~Such variance shall apply only as the natural background level of the St. John's River approach or exceed the standards. In any event, the discharge from the CBCP shall comply with the effluent limitations set forth in Paragraph III.A.12. At least 90 days prior to start of construction, AES shall submit a bioassay program to assess the toxicity of construction dewatering effluent to the DER for approval. Such program shall be approved prior to start of construction dewatering.~~

15.8. Sanitary wastes from AESCB CBCP shall be collected and discharged routed for treatment to the SKC domestic wastewater treatment plant.

#### B. Water Monitoring Programs

1. Necessity and extent of continuation, of monitoring programs and may be modified in accordance with Condition No. XXI, Modification of Conditions.

2. Chemical Stormwater Monitoring - The parameters described in Condition III.A. shall be monitored during discharge as described in condition III A. commencing with the start of construction or operation of the CFBs and reported quarterly to the Northeast District Office:

3. Coal, Ash, and Limestone Storage Areas - Runoff from the coal pile, ash and lime stone storage areas shall be retained on-site during normal operations up to the 25-year, 24-hour storm event. ~~directed to the SK waste water treatment facility for discharge under its existing waste water permit.~~ Monitoring of metals, such as iron, copper, zinc, mercury silver, and aluminum, shall be done once a month during any month when a discharge occurs at OSN 008 ~~or once per month from the collection pond.~~

4. The ground water levels shall be monitored continuously at selected wells as approved by the SJRWMD. Chemical analyses shall be made on samples from all monitored wells identified in Condition IV.F. and IV.G. below. The location, frequency and selected chemical analyses shall be as given in Condition IV.F and IV.G. The ground water monitoring program shall be implemented at least one year prior to commercial operation of the CFBs. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/analysis to the SJRWMD.

5. The reclaimed water transferred to Seminole Kraft for cooling tower make-up water shall be

monitored for the following parameters:

<u>Flow (gallons per minute)</u>	<u>Continuous/Flow Meter</u>
<u>pH (standard units)</u>	<u>Weekly/Meter or Grab</u>
<u>Iron (mg/L)</u>	<u>Monthly/Grab</u>
<u>Total Copper (ug/L)</u>	<u>Monthly/Grab</u>
<u>Zinc (mg/L)</u>	<u>Monthly/Grab</u>
<u>Mercury (ug/L)</u>	<u>Monthly/Grab</u>
<u>Silver (ug/L)</u>	<u>Monthly/Grab</u>
<u>Aluminum (mg/L)</u>	<u>Monthly/Grab</u>
<u>Cadmium (ug/L)</u>	<u>Monthly/Grab</u>
<u>Arsenic (ug/L)</u>	<u>Monthly/Grab</u>
<u>Antimony (mg/L)</u>	<u>Monthly/Grab</u>

## IV. GROUND WATER

## A. Water Well Construction Permit

Prior to the construction, modification, or abandonment of a production well for the SK paper mill, Seminole Kraft must obtain a Water Well Construction Permit from the SJRWMD pursuant to Chapter 40C-3, F.A.C. Construction, modification, or abandonment of a production well will require modification of the SK consumptive use permit when such construction, modification or abandonment is other than that specified and described on SK's consumptive use permit application form. The construction, modification, or abandonment of a monitor well specified in Condition IV.H. will require the prior approval of the Department. All monitor wells intended for use over thirty days must be noticed to RESD prior to construction or change of status from temporary to permanent.

## B. Well Criteria, Tagging and Wellfield Operating Plan

Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational ~~put-the-system back-in-an-operative-condition-acceptable-to-the-SJRWMD~~. Failure to make such repairs will be cause for deeming the well abandoned in accordance with Chapter 17.21.02(5), F.A.C., Chapter 373.309, Florida Statutes and Chapter 366.301 (b), and .307 (a), Jacksonville ordinance Code. Wells deemed abandoned will require plugging according to state and local regulations.

A SJRWMD-issued identification tag must be prominently displayed at each SK withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. The SK must notify the SJRWMD in the event that a replacement tag is needed.

~~The-permittee~~ SK must develop and implement a Wellfield Operating Program within six (6) months after of certification construction of wells or start-up of the CBCP. This program must describe which wells are primary, secondary, and standby (reserve); the order of preference for using the wells; criteria for shutting down and restarting wells; describe CBCP and SKC responsibilities in the operation of the well field, and any other aspects of well field management operation, such as who the well field operator is and any other aspects of wellfield management operation. This program must be submitted to the SJRWMD and a copy to BRESO within six (6) months of certification and receive ~~District~~ SJRWMD approval before the wells may be used to supply water for the AES-Cedar Bay CBCP Cogeneration plant.



### C. Maximum Annual Withdrawals

CBCP's maximum annual use from the Floridan aquifer may not exceed 530.7 million gallons. Maximum daily use from the Floridan aquifer may not exceed 1.45 million gallons. The use of potable water from the Floridan aquifer for cooling purposes is prohibited. The use of potable water from the Floridan aquifer for control of fugitive dust emissions is prohibited when alternative water sources are available, such as treated wastewater, shallow aquifer wells or stormwater. The use of Floridan aquifer potable water for the sole purpose of waste stream dilution is prohibited.

### D. Water Use Transfer

The SJRWMD must be notified, in writing, within 90 days of the transfer of this certification. All transfers are subject to the provisions of Section 40C-2.351, F.A.C., which state that all terms and conditions of the permit shall be binding of the transferee.

### E. Emergency Shortages

Nothing in this certification is to be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event of a water shortage, as is declared by the District Governing Board, the AESEB CBCP shall adhere to ~~reductions-in-water-withdrawals-as-specified-by-the-SJRWMD-~~ water shortage restrictions, as specified by SJRWMD to the extent the restrictions apply to all other similar users.

### F. Monitoring and Reporting

1. a. The permittee shall maintain records of total daily use by the AESEB CBCP on a monthly basis for each year ending on December 31st. These records shall be submitted to the SJRWMD on Form EN-3 by January 31st of each year.

b. Prior to beginning water usage, all points where water is delivered from the SKC water supply or wastewater system for use at AESEB CBCP must be equipped with totalizing flow meters. Such meters must maintain a 95% accuracy, be verifiable and be installed according to the manufacturer's specifications.

c. AESEB CBCP must maintain the required flow meter(s). In case of failure or breakdown of any meter or other flow measuring device, the SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

d. Total withdrawals from each monitored source must be recorded continuously, totalled monthly, and reported to the SJRWMD at least every six months from the initiation of the monitoring using SJRWMD Form No. EN-50.

e. AEESEB CBCP must have all flow meters checked for accuracy once every 3 years within 30 days of the anniversary date of commencement of operation of the CBCP, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD Form No. EN-51 must be submitted to the SJRWMD within 10 days of meter inspection and calibration.

2. Water quality samples shall be taken in May and October of each year from each SK production well. The samples shall be analyzed by an HRS DER certified laboratory for the following parameters:

Magnesium	Sulfate
Sodium	Carbonate
Potassium	Bi-Carbonate (or alkalinity if pH is 6.9 or lower)
Chloride	Calcium

All major ion analyses shall be checked for anion/cation balance and must balance within 5 percent prior to submission. It is recommended that duplicates be taken to allow for laboratory problems or loss. The sample analyses shall be submitted to the SJRWMD by May 30 and October 30 of each year.

~~3.---AEESEB--shall-mitigate-any-adverse-impact-caused by-withdrawals-permitted-herein-on-legal-uses-of-water-existing at-the-time-of-permit-application.---The-SJRWMD-has-the-right-to curtail-permitted-withdrawal-rates-or-water-allocations-if-the withdrawals-of-water-cause-an-adverse-impact-on-legal-uses-of water-which-existed-at-the-time-of-permit-application.---Adverse impacts-are-exemplified-but-not-limited-to:---~~

~~a.---Reduction-of-well-water-levels-resulting-in-a reduction-of-10-percent-in-the-ability-of-an-adjacent-well-to produce-water;---~~

~~b.---Reduction-of-water-levels-in-an-adjacent-surface water-body-resulting-in-a-significant-impairment-of-the-use-of water-in-that-water-body;---~~

~~c.---Saline-water-intrusion-or-introduction-of pollutants-into-the-water-supply-of-an-adjacent-water-use resulting-in-a-significant-reduction-of-water-quality;---~~

~~d.---Change-in-water-quality-resulting-in-either impairment-or-loss-of-use-of-a-well-or-water-body.---~~

3. Legal uses of water existing at the time of certification application may not be significantly adversely impacted by the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.

~~4.---The-AESEB--shall-mitigate-any-adverse-impact caused-by-withdrawals-permitted-herein-on-adjacent-land-uses which-existed-at-the-time-of-permit-application.---The-SJRWMD has-the-right-to-curtail-permitted-withdrawal-rates-of-water allocations-if-withdrawals-of-water-cause-any-adverse-impact-on adjacent-land-use-which-existed-at-the-time-of-permit application.---Adverse-impacts-are-exemplified-by-but-not limited-to:--~~

~~a.---Significant-reduction-in-water-levels-in-an adjacent-surface-water-body;-~~

~~b.---Land-collapse-or-subsidence-caused-by-a reduction-in-water-levels;-or-~~

~~c.---Damage-to-crops-and-other-types-of-vegetation;-~~

~~d.---Significant-increases-in-Chloride-levels-such that-it-is-likely-that-wells-from-the-plant-or-those-being impacted-from-the-plant,-will-exceed-250-mg/l-~~

4. Off-site land uses existing at the time of certification application may not be significantly adversely impacted as a result of the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to revocation modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the-AESEB CBCP.

5. During the seventh year following issuance of this certification order, AES-Cedar-Bay CBCP shall submit a report to SJRWMD, DER, and BRESO demonstrating compliance with these conditions of certification, Chapter 373, Florida Statutes, and the Rules of SJRWMD and DER, applicable to the consumptive use of water. Compliance shall be demonstrated with rules and statutory provisions in effect at that time.

SJRWMD shall evaluate the report and notify DER in a report of any issues regarding compliance with this certification and applicable rules and statutory provisions, including whether the consumptive use of water for the CBCP complies with those provisions of Chapter 272, Florida Statutes, and DER's and SJRWMD's rules applicable to consumptive use and whether any conditions of certification

must be amended, added or deleted in order insure that the referenced rules and statutory provisions. SJRWMD shall respond within 30 days of receipt of CBCP's report as to whether or not it contains information sufficient to make a determination as to compliance with the referenced rules and statutory provisions. Thereafter, DER shall notify CBCP and RESD within ninety (90) days after DER's determination that CBCP's report is sufficient. Section 40C-1.610, F.A.C., shall apply. An opportunity for hearing pursuant to Section 120.57, Florida Statutes, shall be afforded any party. In any hearing requested pursuant to this condition of certification, the burden of demonstrating compliance shall be on CBCP. The continued consumptive use of water for the CBCP shall be dependent upon CBCP demonstrating and presenting sufficient data to establish that its consumptive use meets the referenced rules on statutory provisions. The Board hereby delegates to the Secretary the authority to enter final orders regarding this condition in the event an administrative hearing is requested.

#### G. Ground Water Monitoring Requirements

After consultation with the DER, BRESO, and SJRWMD, AESEB CBCP shall install a monitoring well network to monitor ground water quality horizontally and vertically through the aquifer above the Hawthorn Formation. Ground water quantity and flow directions will be determined seasonally at the site through the preparation of seasonal water table contour maps, based upon water level data obtained during the applicant's proportional monitoring program. From these maps and the results of the detailed subsurface investigation of site stratigraphy, the water quality monitoring well network will be located. A ground water monitoring plan that meets the requirements of Section 17-28.700(6)(d), F.A.C., shall be submitted to the Department's Northeast District Office for review. Approval or disapproval of the ground water monitoring plan shall be given within 60 days of receipt. Ground water monitoring shall be required at AESEB's CBCP pelletized ash storage area, each sedimentation pond, the lime mud storage area, and each coal pile storage area. Insofar as possible, the monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program, provided that the wells construction will not preclude their use. Existing wells will be properly sealed in accordance with Chapter 17-21, F.A.C., whenever they are abandoned due to construction of facilities. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to at least three casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. No sampling or analysis is to be initiated until receipt of written approval of a site-specific quality assurance project plan (QAPP) by the

Department. Results shall be submitted to the BRESO by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required around unlined ponds or storage areas:

TDS	Cadmium
Conductance	Zinc
pH	Copper
Redox	Nickel
Sulfate	Selenium
Sulfite	Chromium
Color	Arsenic
Chloride	Beryllium
Iron	Mercury
Aluminum	Lead
	Gross Alpha

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

#### H. Leachate

##### 1. Zone of Discharge

Leachate from AESEB's CBCP's coal storage piles, SK's lime mud storage area or CBCP's sedimentation ponds shall not cause or contribute to contamination of waters of the State (including both surface and ground waters) in excess of the limitations of Chapter 17-3, F.A.C., beyond the boundary of a zone of discharge extending to the top of the Hawthorn Formation below the waste landfill cell or pond rising to a depth of 50 feet at a horizontal distance of 200 feet from the edge of the landfill or ponds, or rising to the boundary of the site, as appropriate.

##### 2. Corrective Action

When the ground water monitoring system shows a potential for this facility to cause or contribute to a violation of the ground water quality standards of Chapter 17-3, F.A.C., at the boundary of the zone of discharge, the

appropriate ponds or coal pile shall be bottom sealed, relocated, or the operation of the affected facility shall be altered in such a manner as to assure the Department that no violation of the ground water standards will occur beyond the boundary of the zone of discharge.

V. CONTROL MEASURES DURING CONSTRUCTION

A. Storm Water Runoff

During construction, appropriate measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the total suspended solids to 50 mg/l or less and pH to 6.0 to 9.0 at OSN 003 during rainfall events that are lesser in intensity than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 29 NTU above background in waters of the State.

Control measures shall consist at the minimum of sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 at OSN.003. Stormwater drainage to the Broward River ~~or St. Johns River~~ shall be monitored as indicated below:

Monitoring Point	Parameters	Frequency	Sample Type
*Storm water drainage to the Broward River from the runoff treatment pond	BOD5, TOC, suspended solids, turbidity, dissolved oxygen, pH, TKN, Total phosphorus, Fecal Coliform, Total Coliform	**	**
	Oil and grease	**	**

\*Monitoring shall be conducted at suitable points for allowing a comparison of the characteristics of reconstruction and construction phase drainage and receiving waters.

\*\*The frequency and sample type shall be as outlined in a sampling program prepared by the applicant and submitted at least ninety days prior to start of construction for review and approval by the DER Northeast District Office. The District Office will furnish copies of the sampling program to the BRESO and SJRWMD and shall indicate approval or disapproval within 60 days of submittal.

## B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and the BRESD.

## C. Environmental Control Program

Each permittee shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification. A written plan for controlling pollution during construction shall be submitted to DER and BRESD within sixty days of issuance of the Certification. The plan shall identify and describe all pollutants and waste generated during construction and the methods for control, treatment and disposal. Each permittee shall notify the Department's Northeast District Office and BRESD by telephone within 24 hours if possible if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to the Department, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

## D. Construction Dewatering Effluent

Maximum daily withdrawals for dewatering for the construction of the railcar unloading facility must not exceed 0.288 million gallons.

Dewatering for the construction of the railcar unloading facility shall terminate no later than nine months from the start of dewatering.

Should the permittee's dewatering operation create shoaling in adjacent water bodies, the permittee is responsible for removing such shoaling.

All offsite discharges resulting from dewatering activities must be in compliance with water quality standards required by DER Chapters 17-3 and 17-4, F.A.C.

There shall be no discharge of construction dewatering effluent.

## VI. SAFETY

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized

to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety Section of the Florida Department of Commerce will also be complied with.

#### VII. SCREENING

The AESEB CBCP shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

#### VIII. TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XI, Noncompliance Notification.

#### IX. SOLID WASTE STORAGE AND DISPOSAL

CBCP shall be responsible for arranging for the proper storage, handling, disposal, or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the AESEB CBCP facility shall be removed from site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash will be pelletized, or made into aggregate form, and either shipped back to the mine utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by companies specializing in the marketing and utilization of combustion by-products. The bottom ash and fly ash shall not be disposed of in a landfill within Duval County. If the permittees decide to dispose of the bottom ash or fly ash by other than returning it to the mine, they shall notify BRESD and DER. Prior to removal and disposal of spent lime mud and pond tailings, the permittees shall determine whether those wastes are hazardous under 40 CFR 26 and 17-730, F.A.C. If wastes are determined to be hazardous, they shall be disposed of in accordance with Chapter 17-730, F.A.C., after consultation with the DER and BRESD. If not hazardous, disposal shall be to a landfill designed to ensure compliance with groundwater quality criteria as contained in Chapters 17-3, and 17-730 F.A.C. All solid wastes disposed of on site shall comply with the provisions of Chapter 17-7, F.A.C. Ground water monitoring in accordance with 17-4, and 17-28, F.A.C. shall be implemented at the lime mud disposal site.

At least ninety (90) days prior to disposal or use of any sludge generated by pretreatment of reclaimed Seminole Kraft wastewater or zero wastewater discharge system, CBCP shall report to DER and RESD concerning the chemical characterization of any such sludge. DER reserves the right



to require additional sampling and analysis as necessary to ensure that the above-cited, AESEB CBCP shall obtain a letter of acceptance from a permitted disposal site. On or before the last day of the first year of commercial operation, and each year of commercial operation, and each year of commercial operation thereafter, AESEB CBCP shall report to DER and RESD concerning the composition and quantity of sludge generated by the zero water discharge system and the method of disposal, including name and location of facilities handling, treating, storing, and/or disposing of said sludge waste.

#### X. CHANGE IN DISCHARGE

All discharges or emissions authorized herein to AESEB CBCP shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of this certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of new or supplemental application to DER's Siting Coordination Office pursuant to Chapter 403, F.S.

#### XI. NONCOMPLIANCE NOTIFICATION

If, for any reason, either permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the DER's Northeast District Office and BRESD office by telephone as soon as possible but not later than the first DER working day after the permittee becomes aware of said noncompliance, and shall confirm the reported situation in writing within seventy-two (72) hours supplying the following information:

A. A description and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying event.

#### XII. FACILITIES OPERATION

Each permittee shall at all times maintain good working order and operate as efficiently as possible all of its treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department (Northeast District) after approval and after notice to BRESD except where otherwise authorized by applicable regulations.

**XIII. ADVERSE IMPACT**

The permittees shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

**XIV. RIGHT OF ENTRY**

The permittees shall allow the Secretary of the Florida Department of Environmental Regulation and/or authorized DER representatives, and representatives of the BRESO and SJRWMD, upon the presentation of credentials:

A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

B. To have access to and copy all records required to be kept under the conditions of this certification; and

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or emissional pollutants; and

D. To assess any damage to the environment or violation of ambient standards.

E. SJRWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related EWP CBCP facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

F. BRESO authorized staff, upon proper identification, will have permission to enter, inspect, sample any discharge, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

**XV. REVOCATION OR SUSPENSION**

This certification may be suspended, or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

**XVI. CIVIL AND CRIMINAL LIABILITY**

This certification does not relieve either permittee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification,

applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve either permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

#### XVII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor 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. The permittees shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

#### XVIII. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

#### XIV. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

#### XX. REVIEW OF SITE CERTIFICATION

A. The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination Control Act Amendments of 1972 for the plant units, the Department shall review all monitoring data that has been submitted to it or it's agent(s) during the preceding five-year period for the purpose of determining the extent of the permittee's

compliance with the conditions of this certification of the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittees. Such review will be repeated at least every five years thereafter.

#### XXI. MODIFICATION OF CONDITIONS

The conditions of this certification may be modified in the following manner:

A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this certification.

B. All other modifications shall be made in accordance with Section 403.516, Florida Statutes.

#### XXII. FLOOD CONTROL PROTECTION

The plant and associated facilities shall be constructed in such a manner as to comply with the Duval County flood protection requirements.

#### XXIII. EFFECT OF CERTIFICATION

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application. Thus, conformance to those criteria, unless specifically amended, modified, or as the Department and parties are otherwise notified, is binding upon the applicants in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

#### XXIV. NOISE

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, the permittees shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise. The permittees shall comply with the applicable noise limitations specified in Environmental Protection Board Rules or The City of Jacksonville Noise Ordinance.

## XXV USE-OF-RECLAIMED-WATER

The CBEP may use either surface water from the Broward or St. Johns River or reclaimed water provided either by the City of Jacksonville or by the Seminole Kraft Papermill as its source of cooling water makeup.

Within six months after issuance of certification, AESEB shall submit to DER an application for a modification containing information concerning the design and operation of the plant cooling system as appropriate for the cooling water source selected. The application shall also be submitted to SJRWMD and BESC, who may report concerning the AESEB cooling water application modification. The AESEB application shall contain all information necessary to demonstrate that operation of the cooling system using either reclaimed or surface water for the preferred cooling water source selected will comply with all relevant non-procedural agency standards, or that AESEB qualifies for a variance. The AESEB application shall also include an analysis of the reasons for the selection of the requested cooling water source over the other preferred alternate sources referred to in the above paragraph. The participating agencies shall respond within 30 days of the receipt of the application modification as to whether or not it contains information sufficient to make a determination as to compliance with non-procedural agency standards. Thereafter, DER shall notify AESEB, BESC, and SJRWMD as to its determination concerning sufficiency. SJRWMD and BESC shall file any reports concerning the application with DER and provide a copy to AESEB within 60 days after DER's determination that the application is sufficient. DER shall indicate its approval or disapproval of the selected cooling water system proposal within 90 days of its determination that the application is sufficient. Any modifications of the certification or the conditions of certification including variances, exceptions, or mixing zones shall be made pursuant to the procedures set forth in Section 403.516, Fla. Stat., and/or Fla. Admin. Code Rule 17-17.211.

Reclaimed water used in the AESEB cooling tower shall be disinfected prior to use. Disinfectant levels in the cooling tower makeup water shall be continuously monitored, prior to insertion in the cooling tower. The reclaimed water shall be treated so as to obtain no less than a 1.0 mg/l free chlorine residual after fifteen (15) minutes' contact time or its equivalent. Chlorination shall occur at a turbidity of 5 Nephelometric Turbidity Units (NTU) or less, unless a lesser degree of disinfection is approved by the Department upon demonstration of successful viral kill.

XXV. USE OF WATER FOR COOLING PURPOSES

The CBCP shall use reclaimed wastewater from the Seminole Kraft paper mill (in addition to any wastewater generated by the CBCP that is suitable for reuse for that purpose) for cooling water supply. In the event of disruption of SKC reclaimed wastewater as the cooling after makeup source for Cedar Bay, Inc., Cedar Bay, Inc. will utilize the water retained in SKC's holding basins or other non-potable sources of water as cooling water makeup.

At least 90 days prior to beginning commercial operation, Cedar Bay Cogeneration, Inc. shall submit to the Department a report concerning the actual measured pollutant characteristics of reclaimed water to be obtained from the Seminole Kraft paper mill. Such report shall be based on approved analytical results from four monthly samples obtained directly from the Seminole Kraft waste stream to be tied in with the CBCP cooling system, and shall include the concentrations of BOD5, COD, total organic carbon, total suspended solids, ammonia, pH, oil and grease, calcium, magnesium, sodium, potassium, alkalinity as mg of CaCO<sub>3</sub>, sulfate, chloride, nitrate, fluoride, silica, chlorine, phosphate (total) as P, cyanide, iron, manganese, aluminum, nickel, zinc, copper, cadmium, chromium, beryllium, arsenic, selenium, antimony, mercury, barium, silver, lead, thallium, phosphorus, and TKN. Where applicable, wastewater sampling and analyses conducted by SKC under the terms of operation permit number I016-200147 may be used to meet the terms of this condition. Any other sampling and analyses submitted under the terms of this permit shall be in accordance with a Department-approved Quality Assurance Plan. Results of all testing and sampling specified above shall be submitted to the Department within 30 days of testing.

Seminole Kraft's generation, treatment, or discharge of its wastewater is not covered by this site certification, and the permitting of Seminole Kraft's generation, treatment, or discharge of its wastewater does not require Siting Board approval.

XXVI. ENFORCEMENT

A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.

B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

C. BRESD may initiate any and all lawful actions to enforce the conditions of this certification that are based on the Department's rules, after obtaining the Secretary's written permission to so process on behalf of the Department.

#### XXVII. ENDANGERED AND THREATENED SPECIES

Prior to start of construction, AESEB CBCP shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

#### XXVIII.--PETROLEUM-STORAGE-TANKS

A.--AES-Cedar-Bay-shall-provide-clean-up-of-the-#1 underground-diesel-fuel-storage-tank-site, which is listed under the EDI program, in accordance with F.A.C. Chapter 17-770.--AES shall complete an Initial Remedial Action (IRA) in accordance with Rule 17-770.300, F.A.C., prior to construction dewatering.--DER and BRESD will receive written notification ten working days prior to initiation of the IRA. AES shall determine the extent of contamination.--AES-Cedar Bay shall then design and install a pump and treatment system at the site, which will create a reverse hydraulic gradient that will prevent the further spread of the contamination by the dewatering operation.--This plan shall be submitted to DER and BRESD for approval thirty days prior to the start of construction dewatering, and shall be implemented prior to commencement of the dewatering operation.--Furthermore, AES Cedar Bay shall submit a Quality Assurance Project Plan (QAPP), a Contamination Assessment Report (CAR) and a Remedial Action plan (RAP), in accordance with F.A.C. Chapter 17-770 to DER for approval with copies to BRESD thirty days prior to the start of construction dewatering.--AES-Cedar-Bay shall provide complete site rehabilitation in accordance with F.A.C. Chapter 17-770.

B.--AES-Cedar-Bay shall develop a QAPP, CAR, and RAP as required and in accordance with Chapter 17-1700, F.A.C. for the site listed in XXVIII, C and D below, and submit these plan to DER for approval with copies to BRESD thirty days prior to the start of construction dewatering.

C.--Prior to construction dewatering, at the underground diesel fuel storage tank #2 site, AES-Cedar-Bay shall:

1.--Perform an IRA with F.A.C. Rule 17-770.300.

2.--Determine the extent of down-gradient contamination and submit that information to BESD, and DER prior to installation of the well described in paragraph C.4 below.

3.--Establish a series of groundwater level monitoring wells at intervals of approximately 250 feet from the coal-unloading site to the #2 tank for determination of the groundwater dewatering cone of influence.--Daily groundwater levels shall be recorded for each of these wells during construction dewatering.--A background well with a continuous water level recorder shall be installed, at a site that would not be influenced by the dewatering operations, to determine ambient conditions at the site.

4.--Install a monitoring well with a continuous water level recorder which will be used to trigger implementation of the RAP.--The well will be located 150 feet down-gradient from the boundary of the plume of contamination determined above in XXVII-C.2.--If the piezometric head in the trigger well drops 6 inches below ambient conditions as compared to the background well, then AES Cedar Bay shall notify DER and BESD of a verified drop of 6 inches or more in the trigger well within three working days and the appropriate portion of the RAP shall be implemented by AES Cedar Bay.

5.--AES Cedar Bay shall submit a plan for the location and construction of the monitoring wells described above in paragraph C.3 and C.4 to DER and BESD for approval. AES Cedar Bay shall submit monthly reports of the groundwater level recordings to DER and BESD.

D.--Prior to construction dewatering, at each of the following tank sites:--underground diesel fuel storage tank #3; underground #6 fuel oil storage tank #5; above-ground #6 fuel oil storage tank #2;--"pitch tank" located North of the lime kilns; AES Cedar Bay shall:

1.--Install 2 down-gradient monitoring wells. AES Cedar Bay shall submit a plan for location and construction of these 2 wells to DER and BESD for approval. BESD shall have the opportunity to observe the construction of these wells.

2.--Sample the above-referenced wells for parameters listed in 17-770.600(8)-F.A.C.--In addition, AES Cedar Bay shall sample the monitoring wells at the above-ground tank sites for acetone and carbon disulfide.--AES Cedar Bay shall split samples with BESD if BESD so requests and submit a report of the analytical results to DER and BESD within ten days of receipt of analyses by AES Cedar Bay.



3.--If contamination is found in the above referenced wells in excess of the clean-up criteria referenced in 17-770.730(5)(a)2, F.A.C. 7-a QAPP, CAR and an RAP will be developed and, DER and BESD shall be provided with that information prior to the installation of the well described in paragraph D.4 below.

4.--Install a trigger well with a continuous water level recorder which will be located 150 feet down gradient from the boundary of the plume of contamination determined above in XXVIII.D.3.--If the piezometric head in the trigger well drops 6 inches below ambient conditions as compared to the background well then AES Cedar Bay shall notify DER and BESD of a verified drop of 6 inches or more in the trigger well within three working days and the appropriate portion of the RAP shall be implemented by AES Cedar Bay.

5.--AES Cedar Bay shall submit a plan for the location and construction of the monitoring wells described above in paragraph D.4, to DER and BESD for approval.--AES Cedar Bay shall submit monthly reports of the groundwater level recordings to DER and BESD.

E.--Implementation of the appropriate portion of the RAP shall commence within 14 days of the determination that the construction dewaterings cone of depression will reach any of contaminated sites.

F.--AES Cedar Bay shall monitor the construction dewatering effluent from their treatment system, once a week during dewatering, for the following criteria:--Benzene-1 ug/l, Total VOA-50 ug/l, Total Naphthalenes (Total naphthalenes + methyl naphthalenes)-100 ug/l, and Total Residual Hydrocarbons-5 mg/l, and polynuclear aromatic hydrocarbons, 10 ug/l.--If the concentrations of contaminants in the effluent rise above those in the above list, AES Cedar Bay shall take corrective actions to return concentrations to acceptable levels.--In monitoring the dewatering effluent for the above contaminants, AES Cedar Bay shall use the methods prescribed in Chapter 17-770.600(8)(b), F.A.C.

G.--If any disagreement arises regarding this condition, the parties agree to submit the matter for an expedited hearing to the DOAH and shall request assignment of the Hearing Officer who has heard this case, if possible, pursuant to 403.5064, F.S.--The informal dispute resolution process shall be used.

H.--Nothing in this condition shall affect the eligibility of reimbursement for clean-up of any site under EDI program.

~~F--Reinjection-or-infiltration-of-groundwater meeting-the-petroleum-contamination-clean-up-criteria-into-the same-zone-from-which-it-was-extracted-pursuant-to-any-of-the approved-remedial-action-plans-shall-be-permitted-and-is hereby-authorized-by-this-condition.--The-proposed-location-of the-recharge-system-shall-be-upgradient-of-the-site-and included-in-the-plans-for-remedial-action-referenced-in XXVIII-A--and-B-~~

XXVIII. Environmentally Sensitive Land Acquisition

A. Periodic Payments

1. As a condition of this certification, CBCP shall be required to make periodic monetary contributions for the purpose of funding a program for the acquisition and management of environmentally sensitive lands in or near Duval County, Florida. It is the intent of the Siting Board that the two million dollar payment made by AES Corporation to The Nature Conservancy, Inc. on or about June 16, 1992, shall be deemed to be the first of the required periodic payments.

2. All periodic payments made by or on behalf of the CBCP under this condition shall be submitted to The Nature Conservancy, which shall hold all funds received in trust for the State of Florida. All funds attributable to the periodic payments required by this condition shall be received, held, disbursed, and expended in conformance with the provisions of this condition.

3. A payment of 2.5 million dollars shall be transmitted within 48 hours of the date on which the CBCP commences commercial operation.

4. Commencing on the first anniversary of the payment required by subsection (3) above, and continuing for 30 years thereafter, a payment of \$300,000 shall be submitted for each year that the CBCP remains in commercial operation. Each annual payment shall be transmitted within 48 hours of the anniversary of the date on which commercial operation commenced at CBCP.

5. Any failure to achieve timely transmission of a periodic payment required by this condition shall be grounds for revocation of the certification.

B. Land Acquisition Process

1. All land acquisition and management funded by the certification shall be undertaken in accordance with the process established by this condition.

2. The Nature Conservancy shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this condition. The Department and The Nature Conservancy shall enter into an agreement which incorporates the provisions of this condition and such other provisions not inconsistent with this condition that the Department finds necessary to assure that this condition is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. There shall be a six member Regional Land Acquisition and Management Advisory Council (RLAMAC) comprising two representatives appointed by each of the following governmental entities: the Department, the St. Johns River Water Management District, and the City of Jacksonville. The Nature Conservancy shall appoint a representative to serve as chair of the RLAMAC. The RLAMAC shall hold one or more public hearings for the purpose of receiving public input as to lands potentially suitable for acquisition under this condition. Following appropriate public input, the RLAMAC shall report its findings to the Department.

4. After review of the RLAMAC report, The Nature Conservancy shall identify and list as many land acquisition options as it deems practicable. A copy of the list shall be submitted to each of the entities represented on the RLAMAC. In establishing this list, The Nature Conservancy shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and recreational uses.

The RLAMAC shall review and approve the land acquisition options list before any parcels are acquired under this condition.

5. Following approval of the list, The Nature Conservancy shall initiate selection of parcels to be acquired. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other

entities to supplement funds available under this condition. After approval by the Secretary of the Department of a proposed acquisition, the parcel shall be purchased by The Nature Conservancy in trust for the State of Florida.

6. Title to any parcel purchased under this condition shall ultimately vest in a governmental entity following a determination by the Secretary of the Department, after consultation with the RLAMAC, as to how the property can be managed most appropriately in the public interest. It is