

Florida Department of Environmental Protection

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 NORTHEAST DISTRICT

OFFICE OFFICE

AUG 1 0 199.1

Re: Duval County - Air Pollution

Power Boiler Nos. 1, 2, 3, Bark Boiler Nos. 1, 2 Permit Nos. A016-228848, A016-228449, A016-228451 A016-225702, A016-225701

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 Ccde (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

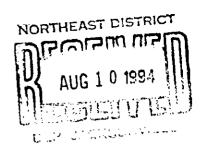
Robert S. Pace, P.E.,

Division Chief

Ernest F. Frey, P.E.

Directór 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: Fohn Brown } 8/27/14 Ran Buck Oven 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 to the listed persons.

FILING AND ACKNOWLEDGEMENT
LED, on this date, pursuant to \$120.82 Florid
system, with the perspected Department Cleri

Dallon

T.,

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

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

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:

JAMES S. ALVES

BRIAN H. BIBEAU

KATHLEEN BLIZZARD

THOMAS M. DEROSE

FRANK E. MATTHEWS

RICHARD D. MELSON

WILLIAM D. PRESTON

CHERYL G. STUART

CAROLYN S. RAEPPLE

WILLIAM H. GREEN

WADE L. HOPPING

DAVID L. POWELL

GARY P. SAMS ROBERT P. SMITH

ELIZABETH C. BOWMAN

RICHARD S. BRIGHTMAN

PETER C. CUNNINGHAM RALPH A. DEMEO

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 handwritten 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 their 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. Oven, DEP OSC
Syed Arif, DEP BAR
Chip Collette, DEP OGC

Mark Carney, U.S. Generating Co. Sandy Hartman, U.S. Generating Co.

1/40

SPA

NPS

Mere.

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

6/28/15

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, disposal and reuse of solid wastes produced by the combustion of coal.

CMissions from the moterial handling system and

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 Weckly. 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

The other mothers that were addressed in the original certification, in the absence of any timely objection, IT IS ORDERED:

The proposed modifications to the Conditions of Certification relating to short fiber test of burn and solid waste disposal at the Cedar Bay Cogeneration Facility are hereby APPROVED.

Post-It** brand fax transmittal n	nemo 7671 # of pages 🥻 5_
TO SALL	From
Co. Dung Poperts	Co. DEP
Dept.	Phone # 921-9642
Fex # 224-8551	Fax #
(

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

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 CEDAR DAY

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 5(2)

Limestone Pulverizer/Conveyors

Limestone Storage Bins (2)

Bed Ash Hopper

Bed Ash Separator

Bed Ash Silo Yent

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, 19921 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

DEPT OF ENVIR. PROT.

Ash Pellet Hydrator;

Scrubber

Ash Pellet Curing Silos:

Scrubber

Ash Pelletizing Pan:

1 Scrubber

TINE 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, 19924 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.

WAFT

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 <u>Limestone Pulverizer/Converyors</u>
(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)

DRAFT

Estimated Limitations

Pollutant_	<u>lbs/hr.</u>	-	pulverizer/conveyors dryers
PM/PM10	1.26* 0.24	1.68 0.32 ^	3.36 0.64
SO2	0.85	1.15	2.3
СО	0.60	0.81	1,62
NÓx	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 <u>limestone pulverizer/conveyors</u> 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

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, 1	Florida.
-----------------------	--------	---------------------------	----------

STATE OF FLORIDA
DEPARTMENTOF ENVIRONMENTAL
PROTECTION

VIRGINIA B. WETHERELL Secretary Marjory Stoneman Douglas B1dg. 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 (904) 488-4805

Cedar Bay Generating Company, Limited Partnership

RECEIVED

August 13, 1993

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 <u>AES Cedar Bay, Inc., and Seminole Kraft Corporation v. State of Florida Department of Environmental Regulation</u>, 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.









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) SO₂ 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_x 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 SO₂, NO_x, 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

Emissions	As Permit	ted As Modified	Method
Particulates			
PM-10	257	234	Enhanced Maintenance
Lead	91	0.78a	for the Fabric
Beryllium	1.5	0.11a	Filtration of PM-10
Hg	3.4	0.38a	and Trace Metals
Acid Gases			
SO_2	4,015	2,598	Lower Sulfur Coal
Fluorides	1,122	9.7a	and Higher Ca/S Ratio
H ₂ SO ₄ Mist	308	6.1	Supplied to the CFBs
NO_x	3,767	2,208	Add SNCR
Products of			
Incomplete Combustion			
СО	2,468	2,273	Improved Combustion
VOCs	195	195	Controls
Totals	12,227.9	7,525.07	

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 Lewton Chiles, Governor Certain 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,

Bany D. C. 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

undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of buisness on

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

SENT BY: MAHONEY ADAMS

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

1

2

1

S

7

C

¢

1

1

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.

4



Florida Department of Environmental Regulation

Twin Towers Office Bidg. ● 2600 Biair Stone Road ● Taliahassee, Florida 32399-2400

Levron Chiles, Governor

Carol M. Begwaer, Secretary

Cedar Boy Cogerestion, Inc 7475 Wisconsin Avenue Betwick , MD 20814-7422

DXITTES+ S/Cedar Bay, Inc. 01 Morth 19th Street

:lington, VA 22209

Permit Number: PSD-FL-137 County: Duval

Latitude/Longitude: 30°25'21"X Cogeneration Project

Projecti for the Codor Bay Cogerentian Project (CBCP) (FAC) air is f permit is issued under the provisions of Chapter 403, Florida atutes (R), and Florida Administrative Code Chapters 17-20 and 17-4. intutes (R), and Florida Administrative Code Chapters 17-20, and 17-4. Housh 17-297 : operate the facility shown on the application and approved rawings, plans, and other documents attached hereto or on file with se Department and made a part hereof and specifically described as ollows:

the installation of an integrated cogeneration power plant omplex at the Seminole Kraft Corporation facility located in Ma CBCPs acksonville, Florida. The power complex will consist of three eel/berk fired circulating fluidized bed (CFB) boilers; the espective coal; handling equipment; and limestone dryers, to be owned no operated by LES Cedar Bay, Inc. and operated to the description, the description,

he CFB boilers, wated at 3,189 MMBtu/w, vill burn fuel made up of personately 86 persont coal and 4 persons bark. The boilers will generate steam to produce power from a turbine generator set. The :ogeneration facility will generate 225 NN of electricity for sale :o Florida Power & Light as well as low pressure process steam for the Seminole Kraft Corporation.

by selective non-codalytic reduction and controlled t by the good combustion litrogen . oxides vill be characteristics which are an inherent part of the CFB technology. Sulfur dioxide will be controlled by limiting the average annual sulfur content to 1.73 and the inherent limestone scrubbing provided by the CFB technology Particulates will be controlled with fabric filters. × 1.2%

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)

5 largely or exclusively coal t whose proheipal final will be coul; 3 a cooling tower ; 2 ash, and other material 4 permitted to input heat at the rate of 6 with the possibility that two (FBs

will fire some short files recycle rejects from their steam host.

GENERAL COMPITIONS:

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.

: 8-31-82 :12:15P# ;

- 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.
- 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. Meither does it authorise 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 regulations. other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 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.
- 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.
- 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.

Cogenestion;

PERMITTEE: ABS/Codar 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,

PERMITTER: J. Lac.

Parait Wo. AC PSD-FL-137 County: Duval

N

-

1

T

1

GENERAL COMDITIONS:

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:
 - q. (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 Persew for Non-attachment
- 14. The parmittee 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 data 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: 7 ABS/Codar Bay/Inc.

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

CBCP

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:

210-297

- 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 1,770,000 TPY for all three CFBs.

see buck

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 GFB 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 1.73 by weight on an annual basis. The sulfur content shall not exceed 1.7 -> 3.32 by weight on a shipment (train load) basis.
- e. Auxiliary fuel burners shall be fueled only with natural gas er No. 2 fuel oil with a maximum sulfur content of 0.3% by 0.05 exeight. The fuel oil or natural gas shall be used only for startups. The maximum annual oil usage shall not exceed 160,000 exceed 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 egas shall not exceed 1120 MMBtu/hr for the CFBs.

+ normally only be used for |

During commercial operation the

Note: all Conditions 1.4., 2.c, 2.d, 2.e, and 4.

Cogenition

PERKITTER: 7 Inc.

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

f. The CFBs shall be fueled only with the fuels permitted in Conditions 1s, 1b, and 1s above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to condition 1915, Medification of Condition(A II.A.12 and B.II.

g. The CTBs may operate continuously, i.e. 8760 hrs/yr., but shall not exceed 25.98 x106 MMBtu/yr Hotel annual heat input,
2. Coal fired Boiler Controls

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

- a. Linestone injection? for control of sulfur dioxide and acid gases.
- b. Baghouse, for control of particulate matter.
- 3. Five gas emissions from each CFB shall not exceed the following:

•		Emission Limitations						
Pollutant		15s/10f	Btu	lbs/hr	TPY	TPY	for 3	CFR
co		0.25	0.175	202 186	325	758	2468	2273
MOX	7	0.29	D-17 ²	308:3 180.7	1256	736.1	3767	2208
502	0.24	0.60	(3-br aver)					_
•	0.204	0.31	(13-10H)	128-5	7338	866	4015	2598
VOC	00	0.015		16.0	65		195	
PM	•	0.020		23.3 19.1	17	78	260	234
PN10		0.020	0.018	22.3 19.1	,26	78	257	234
H2804 mis	t	0-024	4.66 e-04	25.5 0.50	103	2	300	6.1
Pluorides		0.086		21-4 0.79	374	3.2	1122	9.7
Lead		0-007			30	0.26	32	0.78
Mercury			28 2.99 05		3 1.	13 O.13	3.	40.38
Bervillus	l	0.000			01	\$ 0.04		4 0.11

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

- 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 60.424.
- 6 %. 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. (See top of next page)
- (1) Eight hour rolling average, except for whitel and annual compliance tests and the CEM certification, when I-hour standard applies.
- (2) Thirty day rolling everage
- (3) Three-hour rolling average
- (4) Twelve-Month ralling average (Page 6 of 13

. Rule 17-297, F.A.C., and listed in Condition No. Lt. 17:0 or one parmit 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 opacity requirements in Condition No. II.A. 5 shoul be determined with the Continuous Emission Monitoring Systems (Coms) identified in Condition No. II. A.9. -> logerantion PERMITTEE: Permit No. AC PSD-FL-137 ABC/Cedar Bay Inc. County: Duval PA and Da; / The CFBs are subject to 40 CFR Part 60, Subpart De; except that where requirements within this Certification are more restrictive, the requirements of this certification shall apply. > permit >> permit Compliance Tests for each CFB and subsequent __ammonia, Initial compliance tests for PM/PM10, SO2, NOX, CO, VOC, 4 lead, fluorides, mercury, beryllium and H2SO4 mist shall be ျ conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e), and \leftarrow (I).Annual compliance tests shall be performed for PM, (SO2 and NOx, commencing no later than 12 months from the initial test. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e). The compliance tests shall be conducted between 90-100% of the maximum liscensed capacity and firing rate of each permitted fuel. Rule 17-297, F.A.C., and 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_2 and CO_2 .

(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 Approxix A.

(10) Method 10 for CO.

(11) Method 12 for lead. 13A or

(12) Method 13B for fluorides.

14 (23) Method 25% for VOCs. > 18 or

15 (14) Method 1014 for mercury. or EPA Method 29

16 (15) Method 104 for beryllium.

(13) Method 19 for sulphur diaxide removal efficiency pursuant to 40CFR 60.48q.

(17) Method 201 or 201 A for PM10 emsssions.

(18) Amoonia (NHz) Method to be determined by the Department

PERMITTER: Logerant by

Permit No. AC PED-71-137 County: Duval

ے

TLA. II

Continuous Emission Monitoring for each CFE ARSCS shall use Continuous Emission Menitors (CEMS) to determine compliance. CEMS for epacity, EO2, Now, CO, and U2 or CO2, shall be installed, calibrated, maintained and operated for each unit, in accordance with AO CFR 60.47a and 40 CFR 60.47a and 40 CFR 60.47a and 40 CFR 60

performance specifications of 40 CFR 60, Appendix 3-

- 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.
 - Jor A malfunction means any sudden and unavoidable failure of air epollution 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.
- The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- or 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).
- 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 8. 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 400% of the design rated capacity during normal operations.

be: The coal, bank, natural gas and No. 2 fuel oil usage shall be a recorded on a 24-hr (daily) basis for each CPB. 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, at A.16.

PERMITTEE: > logereal to.

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

_

4

| No. Reporting for each CFB

DEP worther

testing

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 A CFR 60.8.

In accordance with full 17-297.570, F.A.C., the Audit

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

RESD

- c. The owner or operator shall submit excess emission reports to RESD-RESD; in accordance with 40 GFR 60. The reports shall include the following:

 Full 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d).
- (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, 160.7(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 460.7(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 CFL 160.7(c)(3)).
 - (4) When no excess emissions have occured 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)). (40 CFL 60.7(e)).
 - d. Annual and quarterly reports shall be submitted to BESD as per F.A.C. Rule 27-2.700(7).
 - 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 17-2.100 defining modification, shall be submitted for approval to DER's Bureau of Air Regulation.

€ 212.200 , F.A.C.

DEP

Nok: 46. a on back of page

PENITTEE: A Cognishion 2004 Coder Bay Inc.

Permit No. AC 75D-71-117 County: Duval

CBCP

B. A25 - Material Mandling and Treatment

1. The material handling and treatment operations may be sucheck of continuous, 1.c. 2760 hrs/yz
Gor cod, likestone, fly ash, and had ash

 The material handling/usage rates shall not exceed the following:

Water (a)	Handling/Usage Rate TPM TPY		
Material			
Coal	117,000	1,170,000	
Limestone	27,000	320,000	
Ply 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, 150,000 gals/year for the three boilers are not expected to be significant; and 1,900,000

a. 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 fubric filter or baghouse controls are as follows: (see back of page)

Source	-Particulate Malesione 196/hz 1984		
-Coal Rail Unloading	neg	nog-	
Coal Belt Peeder	neg	neg	
Coal Crusher	0.41		
Coal Belt Transfer			
Coal Sile			
Linestone Crusher	0.06	0.28	
Linestone Hopper	0.01		
Fly Ash Big	0.02	0.10	
304 Ash Ropper	0.06	0.38	
Ash Silo			
Common Feed Hopper	0.03		
		0.25	
Ash Unicades			

The emissions from the above listed sources and the limestone dryers are subject to the particulate emission limitation requirement of 0.00 gr/dscf Hovever, neither DER ner BESD will require

particulate tests in accordance with EPA Method 5 unless the

allowed by fule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source should be required for PM wass emissions to domonstrate that the bag house contol systems can achieve the 0.003 gr/dscf. The performance tests should be conducted using EPA Method 5 pursuent to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July 1991) Mussion

0.003

a Cogerantion PERMITTEE:

Permit No. AC PSD-FL-137

_

←

ABS/Cedar Bay Inc.

County: Duval

WE-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 17-3. (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):

•	Estimated Limitations			
Pollutant	lbs/hr	TPY 1	PY for 2 dryers	
PM/PM ₁₀	D-25 0.24	1-1 0.32	2.2 0.64	
SO ₂	5-00 0.85	21.9 1.15	43.8 2.3	
co	0.60	2.6 0.81	5.2 1.62	
NOx	2.40	10-5 3.25	21.0 6.5	
VOC	0.05	2-20.06	0.12	

Visible emissions from the dryers shall not exceed 5% opacity. -Ifnaturel gas is used, emissions limits shall be determined by factors contained in AP=42 Table 1. 4-1, Industrial 10/06.

Sulfur content of should not exceed 0.05 2 by weight. The maximum a of No.2 full

- 8 %. The maximum No. 2 fuel oil firing rate for each limestone dryer -- shall not exceed 120 gals/hr, or 2,050,000 gals/year. This reflects a combined total fuel oil firing rate of 240 gals/hr, and 2,100,000 **≫ 350,400** 700,800 Œ gals/year, for the two dryers. The maximimum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MMCF per year
- PM and 98. 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 Methods & Sand 9, respectively. 1991 - RESD Appudix A
- 10.9: Compliance test reports shall be submitted to BESD within 45 days of test completion in accordance with Chapter 17-2.700(7) of Rule 17-297,570 of the F.A.C. 2he ?.A.G.
- 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's Bureau of Air Regulation (BAR).

212.200

PERKITTEE: A loguenton

1.7

Permit Mo. 'AC PED-71-137 County: Duval

C. Requirements For the Permittees

CBCP

RESD

 \leftarrow

←

- and Office 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 EESD office. RESD
- 3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or vatering areas of disturbed soils, will be taken by the paraletees. CBCP. CBCP is subject to all applicable provisions of Rule 17-246.310(3), F.A.C., the confined Emissions of Particulate Maxter.
- 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 CTBs and the two unit limestone dryers shall not exceed 6.0 percent by eveight. 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 GESD inspection.

 On a shipmed (heat load) basis.
- 6. Coal fired in the CFBs shall have a sulfur content not to exceed 1.1 percent by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.
- 7. AZOCS 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. 17-247.345 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: A Connection MB6/Cedar Bay Inc.

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

D. Contemporaneous Emission Reductions

CRCP

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, 7.5.; sharl 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 AESCO 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 Month , 1992 3

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION PLOTECTION

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 Cedar Bay

Project:

Count Duy

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.

- 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 yd³/day wet and 69,588 yd³/yr wet. This reflects a combined total of 420 yd³/day wet and 139,176 yd³/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 x 10⁶ 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 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:

		Emission Limitations		
Pollutant	lbs/MMBtu	<u>lbs/hr.</u>	<u>TPY</u>	TPY for 3 CFBs
CO ·	0.175¹	186 ¹	758	2273
NO _x	0.17 ²	180.7^{2}	736.1	2208
SO ₂	0.24 ³	255.1 ³		
	0.20 4		866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM_{10}	0.018	19.1	78	234
H ₂ SO ₄ 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.]

- 4. Ammonia (NH₃) 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_x and SO₂ 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.

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).

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/PM₁₀, SO₂, NO_x, CO, VOC, lead, fluorides, ammonia, 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, CO, SO₂ and NO_x, 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_2 and CO_2 .
- (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.
- (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_{10} emissions.
- (18) Ammonia (NH₃) 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, SO₂, NO_x, CO, and O₂ or CO₂, 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_x, and SO₂ 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:

	Handling/Usage Rate			
Material	<u>TPM</u>	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., 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):

Estimated Limitations

Pollutant	lbs/hr.	TPY	TPY for 2 dryers
PM/PM ₁₀	0.24	0.32	0.64
SO ₂	0.85	1.15	2.3
co	0.60	0.81	1.62
NO,	2.40	3.25	6.5
NO _x VOC	0.05	0.06	0.12

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.
- 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

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

Available Upon Request

Letter from EPA dated March 27, 1991

DER's Final Determination dated March 28, 1991

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

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

DEP's Final Determination dated August ___, 1993.

Final Determination

Cedar Bay Congeneration 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 <u>not</u> 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 SO₂, NO_x, CO, PM, PM-10, H₂SO₄, 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 SO₂ and other acid gases.
- 2. SNCR will be added to the CBCP to augment the low NO_x 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 SO₂, CO, and NO_x 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, of 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)



3. 24-91 Atlanta, üq

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

4APT-AEB

MAR 27 1991

RECEIVED

APR 1 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 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 $NO_{\mathbf{x}}$ emissions and a SO_2 removal efficiency of 90% resulting in emission limits of 0.29 lb $NO_{\mathbf{x}}/\text{MMBTU}$ and 0.31 lb SO_2/MMBTU . These limits are higher than what is currently being permitted even for pulverized coal boilers. We believe that $NO_{\mathbf{x}}$ add-on controls are technically feasible for this project and that SO_2 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,

Bany D. Anton

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 of	n <u>3-29-91</u>
	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.

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:

- 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: Permit No. AC PSD-FL-137 AES/Cedar Bay Inc. 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.

- 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.

- 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.
- The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance,

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.

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.

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

- f. The CFBs shall be fueled only with the fuels permitted in Conditions la, lb, and le 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 lbs/hr	Limitations TPY	TPY for 3 CFBs
co	0.19	202	823	2468
ИОХ	0.29	308.3	1256	3767
so ₂	0.60 (3-hr avg.)			
VOC	0.31 (12 MRA)	329.5	1338	4015
PM	<u>0.015</u> 0.020	<u>16.0</u>	<u>65</u> 87	<u> 195</u>
PM ₁₀	0.020	21.3 21.3	87 86	260 257
H ₂ SO ₄ mist	0.024	25.5	103	308
Fluorides	0.086	91.4	374	1122
Lead Mercury	0.007	7.4	30	91
Beryllium	0.00026 0.00011	0.276 0.117	1.13 0.5	3.4 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.

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

- 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/PM₁₀, SO₂, NOx, CO, VOC, lead, fluorides, mercury, beryllium and H_2SO_4 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, $\rm SO_2$ 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 liscensed 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 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.
- (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.

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

8. Continuous Emission Monitoring for each CFB AESCB shall use Continuous Emission Monitors (CEMS) to determine compliance. CEMS for opacity, SO_2 , NOX, CO, and O_2 or CO_2 , 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.

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

- 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 measured 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 occured 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.

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

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

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

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

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 TPY	Limitations TPY for 2 dryers
PM/PM ₁₀	0.25	1.1	2.2
so ₂	-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 maximimum natural gas firing rate for each limestone dryer shall

The maximimum natural gas firing rate for each limestone dryer shall not exceed 16,800 CF per hour, or 147 MMCF 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).

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

- 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.

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

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 Much , 1991

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner, Secretary

Attachment 1
Available Upon Request

Attachment 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

4APT-AEB MAR 27 1981

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/Codar 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 Of 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, emissions and a SO₂ removal efficiency of 90% resulting in emission limits of 0.29 lb NO./MMDTU and 0.31 lb SO₂/MMBTU. These limits are higher than what is currently being permitted even for pulverized coal boilers. We believe that NO $_{\rm X}$ add-on controls are technically feasible for this project and that SO₂ 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

TAKE
PREDE IN
AMERICA

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

December 24, 1992

RECEI.

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 (SO₂) emissions represent best available control technology; however, we believe better SO₂ 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 that 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).

Therefore, to be consistent with other recently proposed and permitted projects, we recommend that the SO₂ emission limits for the CBCP be lowered accordingly.

ENSR performed SO₂ 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 SO₂ 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

Jaues Williams

CE: 77 Jimmes 73. 77 Italy

B. C. M. W. G. Huttyree H. Kalled - C. J. M. J. Selan Attachment 5

المتنا

STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

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

Petitioners,

VS.

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.

DOAH CASE NO. 88-5740

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 hersto 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 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, and SO, 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, SO₂, NO₂, CO, and O₂ or CO₂, 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, NO₂, and SO₂ 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.

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 PB (power boiler), and 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, 310
SO₂ 25, except as provided in E.2 below.

- 2. In the event that the ceiling for SO2 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 SO2 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 SO2 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

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.

TOUR REPORT TOLK OF MAIN TELL ROOM FOR BUILD

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

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 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.
- 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 CBCP turbine generator is 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

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

- 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 Seminols 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.

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

Stafford Campbell Date: 4 Mg/45	Sierra Club, Florida Audubon Society, The Duval Audubon Society, Inc.
By: Bolinia Brownd Barbara Broward, President Date: 4/13/93	by: Ames A. Heard, Attorney Date: 4/13/93
Cedar Bay Cogeneration, Inc. By: Gary P. Sams, Attorney	Florida Dapartment of Environmental Regulation By: Red Toldon
Date: 4/12/43	Richard T. Donelan Assistant General Counsel Date: 2 April 93
City of Jacksonyalle	St. Johns River Water Management District
ED AUSTIN	Ossidant Gerard! Coursel
Its: MAYOR Date: April 14, 1993	Its: Assistant General Coursel
Seminole Front Corporation	Charles W. Bostwick
By: Scott Shirley, Attorney	Date: /3 A 1993
Date: 4/12/95	<u>-</u>

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

Charles W. Bostwick

Data: 125 Agric 1973

SETTLEMENT STIPULATION

ATTACEMENT A

ALL MEMBERS OF CITIZENS' COMMITTEE

P 0 2

ATTACHMENT A

STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

AES CEDAR BAY, INC. and SEMINOLE KRAFT CORPORATION,

Petitioners.

VB.

DEPARTMENT OF ENVIRONMENTAL REGULATION.

Respondent,

and

CITY OF JACKSONVILLE, DEPARTMENT OF COMMUNITY AFFAIRS, PUBLIC SERVICE COMMISSION, BT. JOHNS RIVER WATER MANAGEMENT DISTRICT, JACKSONVILLE ELECTRIC AUTHORITY, CHARLES W. BOSTWICK, WILLIAM C. BOSTWICK, EARNETI 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. BDd 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 BARCIAY COOPER

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

Signature of Notary Public

Margaret A. Z. Stanley
Name of Notary (Types Printed or Stanges)

Commission Number (u sot isgitts on set);

My Commission Expires (11 mot legible or mail):

NOTARY PUBLIC, STATE OF FLORIDA My sommission expires Aug. 30, 1993 Sonded thru Patterson-Secht Agency

SETTLEMENT STIPULATION

. 30) 10380 mala on ham med (34j. (#20/20

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 filipg 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 ____ 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 \$120.52
Florida Statutes, with the designated Department Cierk, receipt of which is hereby acknowledged.

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

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

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

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

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

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

this \(\lambda \) day of May, 1993.

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

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

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

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

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

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

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

TABLE OF CONTENTS

		APPENDIX A	
			PAGE NO.
I.	GEN	ERAL	1
II.	3 77		
11	AIR		1
	Α.		1
		1. Fluidized Bed Coal Fired Boilers (CFB)	ı
		 Coal Fired Boiler Controls 	3
		3. Flue Gas Emissions	3
		4. Ammonia (NH) Slip from Exhaust Gases	4
		5. Visible Emissions	4
		6. Compliance with permit limits	4
		6. Compliance with permit limits7. CFB subject	4
		8. Compliance Tests	4
	•	9. Continuous Emission Monitoring 10. Operations Monitoring 11. Reporting for each CFB	5
		10. Operations Monitoring	6
		11. Reporting for each CFB	6
		12. Submitting Changes for Approval	7
		13. All Records of Documentation File	7
		Minimum Years	
		14. Permittee Subject to Provisions of	7
		Rule 17-210.700	
		15. Permittee Subject to Provisions of	7
		Rule 17-210.650	
		16. Permittee Subject to Provisions of	7
	_	Rule 17-4.160	
	В.		8
	С.	The property of the contract o	10
	Ď.	Contemporaneous Emission Reductions	11
	E.	SK Steam Boiler Emissions	12-
III.	WATI	er discharges	13
	Α.	Plant Effluents and Receiving Body of Water	13
		 Discharge of Cooling System 	13
		2. Zero Discharge Plan	13
		3. Receiving Body of Water	13
		4. Point of Discharge	13
		5. Chemical Wastes from CBCP	13
		6. SKC Shut Down Through Cooling System	13
		7. Storm Water Runoff	14
		8. Sanitary Wastes	15
	B.	Water Monitoring Programs	15

IA	GROUND WATER A. Water Well Construction Permit	17 17
	B. Well Criteria, Tagging and Operating Plan C. Maximum Annual Withdrawals	17 18
	D. Water Use Transfer	18
	E. Emergency Shortages F. Monitoring and Reporting	18 18
	G. Ground Water Monitoring Requirements	20
	H. Leachate I. Water Use Audit	21 22
	J. Water Ose Addit J. Water Conservation Awareness Program	22
v.	CONTROL MEASURES DURING CONSTRUCTION	. 23 23
	A. Storm Water Runoff B. Sanitary Wastes	23
	B. Sanitary Wastes C. Environmental Control Program	23 24
	D. Construction Dewatering Effluent	24
VI	SAPETY	24
VII.	SCREENING	24
VIII.	TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS	24
IX.	SOLID WASTE STORAGE AND DISPOSAL	24
x.	CHANGE IN DISCHARGE	25
XI.	NONCOMPLIANCE NOTIFICATION	26
XII.	PACILITIES OPERATION	26
xiri.	ADVERSE IMPACT	26
XIV.	RIGHT OF ENTRY	26
XV.	REVOCATION OR SUSPENSION	27
XVI.	CIVIL AND CRIMINAL LIABILITY	27
xvil.	PROPERTY RIGHTS	27
XVIII.	SEVERABILITY	27
xviv.	DEFINITIONS	28
XX.	REVIEW OF SITE CERTIFICATION	28
xxi.	MODIFICATION OF CONDITIONS	28
xxi.	PLOOD CONTROL PROTECTION	28
xxiii.	EFFECT OF CERTIFICATION	29

-

.

XXIV.	NOISE	29
XXV.	USE OF WATER FOR COOLING PURPOSES	29
XXVI.	ENFORCEMENT	. 30
XXVII.	ENDANGERED AND THREATENED SPECIES	30
XXVIII.	ENVIRONMENTALLY SENSITIVE LAND ACQUISITION	30
XXIX.	TRANSFER OF CERTIFICATION	2.5

.

.

STATE OF PLORIDA 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.

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

I.

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 3 /day wet and 69,588 yd 3 /yr wet. This reflects a combined total of 420 yd 3 /day wet and 139,176 yd 3 /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.la, lb, and le 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 106 MMBtu/yr total annual heat input.
- 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.

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>Po</u>	llutant	lbs/MMBtu	Emission Lim lbs/hr.		TPY for 3 CFBs
Fl Le Me	2 C	0.175 ₂ 0.17 ₃ 0.24 0.20 4 0.015 0.018 0.018 4.66e-04 7.44e-04 6.03e-05 2.89e-05 8.70e-06	186 1 180.7 2 255.1 2 16.0 19.1 19.1 0.50 0.79 0.06 0.03 0.01	758 736.1 866 65 78 78 2.0 3.2 0.26 0.13 0.04	2273 2208 2598 195 234 234 6.1 9.7 0.78 0.38 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 (NH3) 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 SO₂ 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 $_{10}$, SO $_{2}$, NOx, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H $_{2}$ SO $_{4}$ 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_2 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_2 and CO_2 .
- (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.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (1/4) Method 18 or 25 for VOCs.
- (15) Method 101A or EPA Method 29 for mercury.
- (16) Method 104 for beryllium.
- $(\sqrt{17})$ Method 201 or 201A for PM10 emissions.
- (18) Ammonia (NH3) Method to be determined by the Department.
 - 9. Continuous Emission Monitoring for each CFB

CECP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO₂, NO_X, CO, and O₂ or CO₂, 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, NOX, and SO₂ 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 li 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>	Handling TPM	/Usage Rate 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., 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:

Material	Handling TPM	/Usage Rate 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., 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):

	Es	timated Li	.mitations	
Pollutant	lbs/hr	TPY_	TPY for 2	dryers
PM/PM ₁₀	0.24	0.32	0.64	
SO ₂	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_X 310 SO_2 25, except as provided in (2) below

- 2. In the event that the ceiling for SO₂ 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 SO₂ 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 SO₂ 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 Plow (MGD)
TSS (mg/l)
pH

Discharge Limits
Instantaneous Maximum
Report
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

IVI.

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

Chloride

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. 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 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 pН 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	Prequency	Sample	Туре
*Storm water drainage to the Broward River from the runoff treatment pond	BOD5, TOC, spended solid turbidity, of solved oxyge pH, TKN, Tot phosphorus, Fecal Coliforotal Coliforotal Coliforotal	ds, dis- en, cal orm,		**
	Oil and grea	ıse **	<u>.</u>	**

*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 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. PLOOD 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 CaCO3, 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 1016-200147 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.
- 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.
- Title to any parcel purchased under this 6. 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. 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 The Siting Board hereby delegates to the for management. 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. notification from the Department that the selection has occurred, TNC shall forthwith execute a transfer of title to the designated entity or entities.
- 7. The 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. The 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. TRANSPER 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.