(FOR INTERNAL USE ONLY)

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources

Facility Owner/Operator Name: Cedar Bay Generating Company, L.P.
Facility ID No.: 0310037 Site Name: Cedar Bay Generating Facility
County: Duval
application receipt date 06/14/96

I. Preliminary scanning of application submitted.

a. Was application submitted to correct permitting authority? Y ✓ N ____
b. Was an application filed? Y* ✓ N ____
c. Was the application filed timely? Y* ✓ N ____

d. Application format filed [check one].
Hard copy of official version of form? ✓ ELSA? ____
A facsimile of official version of form? ____ Some combination? ____
03/21/96

e. 4 copies (paper/electronic) submitted? Y ✓ N ____

f. Electronic diskettes protected/virus scanned/marked? Y ____ N ____ N/A ✓
by _____ date ___/___/___

g. Entire hard copy of Section I. provided (Pages 1-8 of form)? Y ✓ N ____
Facility identified (Page 1)? [if not complete a Page 1] Y* ✓ [Attached ____]
R.O. certification signed and dated (Page 2)? Y* ✓ N ____
P.E. certification signed and dated (Page 7)? Y* ✓ N ____

h. Any confidential information submitted? Y ____ N ✓
If yes, R.O. provided hard copy to us and EPA? Y* ____ N ____
If yes, hard copy locked up and note filed with application? Y* ____ N ____

i. Type of application filed.
TV application for 'existing' Title V Source only? Y ✓ N ____
Any units subject to acid rain? Y ____ N ✓

Note(s): [*] = mandatory.

Comment(s): _____

Reviewer's initials SD date 06/17/96 Concurrence initials _____ date ___/___/___

(FOR INTERNAL USE ONLY)

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources (cont'd)

II. Application logging.

ARMS Permit Number assigned 0 3 1 0 3 3 7 - 0 0 2 - AV
logged into ARMS by initials B.M. date ___/___/___

III. Initial distribution of application.

a. Disposition of 4 paper/electronic copies submitted:
   1- Clean originals to file? Y____ N____
   1- ____ District Y____ N____
   1- _____ County [affected local program]? Y____ N____
   1- Permit engineer(s) _____, _____

b. Disposition of electronic files submitted:
   copy placed onto PC? Y____ N____

c. Disposition of ELSA submitted:
   version used [circle]: 1.0 1.1 1.2.1 1.3 1.3a 1.3b
   Uploaded to EARS? Y____ N____
   by _____ date ___/___/___

d. Electronic information submitted previewed? Y____ N____ N/A____

Comment(s):_____

{this checklist was developed from Rule 62-213.420(1)(b)2., F.A.C. and DARM policy}

6/11/96
:\t5opgen\0_check\iapcheck.doc

Your Name	File Name	File Number	Date & Time Out	Date & Time In
Word Alexander	Cedar Bay Generating Co	0310337	09/09/98 10:00a.m.	

Department of Environmental Protection

Jeb Bush
Governor

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

7/2/99

David B. Struhs
Secretary

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Timothy Cotner
Plant Director
Cedar Bay Generating Company, L.P.
9640 Eastport Road
Jacksonville, FL 32226

FINAL Permit No.: 0310337-002-AV
Cedar Bay Cogeneration Facility

_____/

Enclosed is FINAL Permit Number 0310337-002-AV for the operation of the Cedar Bay Cogeneration Facility located at 9640 Eastport Road, Jacksonville, Duval County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; 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 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Preston
904-0505

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 7/22/99 to the person(s) listed or as otherwise noted:

Timothy Cotner, Cedar Bay Generating Company *
Barry Andrews, P.E., ENSR
Hamilton S. Oven, Jr., P.E., DEP, Siting Coordination Office
Chris Kirts, P.E., DEP, Northeast District Office
Richard Robinson, P.E., Duval County AWQD
Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)
Gracy R. Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Barbara J. Boutwell 7/22/99
(Clerk) (Date)

Wendy Alexander

RECEIVED

APR 02 1999

BUREAU OF
AIR REGULATION

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226
Tel: 904.751.4000
Fax: 904.751.7320

April 1, 1999

Ms. Wendy Alexander
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Cedar Bay Cogeneration, L.P. Operating Permit Conference Call
Draft Title V Permit No.: 0310337-002-AV

Dear Ms. Alexander:

We would like tc express our appreciation for the opportunity to discuss the proposed permit conditions and clarify our understanding of those conditions during the conference call we held on Friday, March 26. The input you and Jonathan Holtom provided was very valuable to us.

This letter documents our understanding of the issues discussed during the conference call. Again, thank you for the input.

Present on the 10AM conference call were Wendy Alexander and Jonathan Holtom, PE of the Florida Department of Environmental Protection, as well as Jeff Walker of the Cedar Bay Generating Plant, Michelle Golden and Ray Kenison of US Generating, and Andrew (AJ) Jablonowski of Earth Tech. The call was held to discuss FDEP's 3/15/99 responses to Cedar Bay's 2/11/99 comments to FDEP's December 19, 1998 draft Title V air permit for Cedar Bay.

Opacity: Michelle Golden asked for assistance in interpreting the opacity limits in Section III, Condition A6. Ms. Golden pointed out that there was no regulatory requirement that continuous opacity monitors be installed on all three boilers. She also asked whether the opacity monitor readings would supersede any Method 9 visible emissions check. Mr. Holtom replied that the Method 9 visible emissions requirement does apply to the exhaust stack, and that the question of conflicting data between the opacity monitors and the person doing the visible emissions check would be addressed by the FDEP enforcement branch if the situation arose. He suggested that Cedar Bay should conduct an independent Method 9 test in such a situation.

PSD and NSPS Monitoring/Recordkeeping/Reporting Requirements: AJ Jablonowski explained that several of the comments in the February 12, 1999 letter arose from concern that NSPS monitoring requirements are listed in the permit even though the NSPS limits are not listed. He asked for clarification as to which monitoring/recordkeeping/reporting requirements applied for documenting compliance with which permit limits. Mr. Holtom said that there are two levels of emission limits that apply to the facility. A violation of the stricter PSD limits would have one degree of consequences, while a violation of the less strict NSPS limits would have additional consequences. He said to use the regulatory reference listed on the permit condition to determine where the requirement came from. Mr. Jablonowski asked if the facility should continue to comply with the PSD limits using the PSD monitoring/recordkeeping/reporting requirements, and comply with the NSPS limits using the NSPS monitoring/recordkeeping/reporting requirements. Mr. Holtom said that was an accurate interpretation.

Kerosene Use: Mr. Holtom and Ms. Alexander stated that they had reviewed condition B.4.a further, and had determined that allowing the use of kerosene instead of No. 2 fuel oil could not be allowed through the Title V permitting process. They believe there may be some situations where the emissions from kerosene use would be greater than the emissions from No. 2 fuel oil use. They have therefore concluded that any fuel change will need to be addressed through the PSD permitting process. No change will be made to the original language of condition B.4.a.

Water Spray Use: Mr. Walker brought up Section II, Condition 9 of the permit, which states that water spray and wetting will be used to control fugitive particulate. He stated that water spray is not necessary when conditions are already wet. Mr. Holtom and Ms. Alexander agreed, and agreed to include the term "when necessary" in the condition.

Startup & Shutdown: Mr. Walker said that he had contacted the AWQD regarding developing the text in Appendix PSS-1, but had received no definite response. Mr. Holtom suggested writing a letter to AWQD on the subject, to document that Cedar Bay had made contact. We informed Mr. Walker and Ms. Alexander that we were pursuing a PSD permit modification which will include definitions of startup, shutdown, malfunction, and Full Flow Reheat Bypass. They suggested incorporating the same wording into Appendix PSS-1. They also informed us that other Title V applications were going through the review process with "placeholder" appendices, and that they did not expect the Cedar Bay Title V permit to be delayed because Appendix PSS-1 is not complete.

The letter to AWQD regarding Appendix PSS-1 was sent by Jeff Walker on March 30, 1999. A copy was sent to Wendy Alexander.

Again, thank you for your time and input. If you have any questions, please do not hesitate to contact A.J. Jablonowski at (978) 371-4339 or me at (904) 751-4000.

Very truly yours,

Jeffrey A. Walker

Jeffrey Walker
Environmental Manager

cc: A Jablonowski, Earth Tech 196 Baker Avenue Concord MA 01742
Michelle Golden, US Generating 7500 Old Georgetown Road Bethesda MD 20814
Ray Kenison, US Generating Company 1 Bowdoin Street Boston MA 02114

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400
Lawton Chiles, Governor — Carol M. Browner, Secretary

4/12/99 Phone conversation with:
Buck Oven - Siting Coordination Office.
Topic: Cedar Bay truck loading issue

Buck said no letter was required from him in response to Cedar Bay's notification to him about truck loading of ash.
I said I would go ahead and send out the proposed permit if nothing else needed to be added to the permit concerning the issue.
Buck said that would be fine and mentioned nothing more should need to be added to the Title V Permit on ~~truck loading~~ ~~issue~~ in response to Cedar Bay's notification ~~of~~ about truck loading and ash recipients.

Wendy Alexander

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226
Tel: 904.751.4000
Fax: 904.751.7320

March 30, 1999

Mr. Richard Robinson
City of Jacksonville RESD - Air and Water Quality Division
117 W. Duval Street, Suite 225
Jacksonville, FL 32202

Re: Cedar Bay Draft Title V Permit No.: 0310337-002-AV

Dear Mr.Robinson:

As part of the Title V permitting process of Cedar Bay, FDEP recently issued a draft Title V permit, Permit No. 0310337-002-AV. Section III, A.13 refers to Excess Emissions resulting from start-up, shutdown, or malfunctions pursuant to 62-210.700(1) F.A.C. and Cedar Bay's PSD permit, PSD-FL-137(A). Attached to this section of the draft permit is a permitting note that states "Once a written agreement between the Permittee and AWQD has been acquired approving a Protocol for Start-up and Shutdown, the protocol is automatically incorporated by reference and is part of the permit". The referenced agreement is to be incorporated into the permit via Appendix PSS- Protocol for Start-up and Shutdown. By virtue of this letter, Cedar Bay wishes to specifically define what constitutes start-up and shutdown in the circulating fluidized boilers utilized at this facility and at the time, explain two particular operating conditions, Full Flow Reheat Bypass and Refractory Cure, that fall under the auspices of Start-up.

Start-up and shutdown of Cedar Bay's boilers are a normal part of routine operation. During boiler start-up, the circulating bed material is heated using #2 fuel oil (<0.05%Sulfur) until a bed temperature of 1000° F is attained, at which time the introduction of solid fuel (coal) into the boiler begins. Fuel oil firing continues until the bed reaches a combustion-sustaining temperature of approximately 1400°F. Generally, it takes approximately 12-14 hours from initial fuel oil fire ing in a cold condition circulating fluidized boiler to reach full operation and 3-4 hours from cold firing initiation to full operation. Normal operating temperatures of the boiler bed has a range of 1650°F - 1780°F.

The combustion of #2 oil will contribute CO emissions considerably higher than permitted limits on both a heat input (lb/mmBtu) and mass(lb/hr)basis. In addition, since compliance with the CO emission limit is determined on a 8 hour rolling average, the potential exists for any average CO emission value determined less than 8 hours after the boiler reached 1400°F to be above permitted limits.

Full flow re-heat bypass is a unique mode of operation in which Cedar Bay is able to supply it's steam host, Smurfit Stone, up to 380,000 lb/hr of process steam while bypassing the steam turbine. This is accomplished by bypassing steam from the main steam piping to the reheat section of the boiler. This condition allows the maintenance of critical areas of the plant without losing the ability to supply Smurfit Stone with the required steam flow. In order to attain this mode of

operation, the boiler must be first shutdown, then restarted by firing fuel oil. Thus, the transition to full flow reheat bypass should be considered a start-up condition. Similarly, the transition from full flow reheat bypass back to normal operation requires the same procedure. In addition, while in the full flow reheat bypass mode of operation, low variable steam demands from the steam host (paper machine trips) may necessitate supplemental fuel oil firing to increase the bed temperature. This results in corresponding increase in CO emissions . The CFB is again in transition to solid fuel oil firing temperatures. However, FFRB can be operated at sustainable temperatures for extended periods given sufficient steam demand, therefore, full flow reheat bypass would normally be treated as normal operation with corresponding applicable requirements unless a start-up/shutdown condition as described in this paragraph occurs.

Refractory curing presents a special start-up case for Cedar Bay. When refractory is replaced during a boiler outage, it must be cured by oil firing for extended periods of time with defined ramping rates (up to 24 hours). Therefore, Cedar Bay is taking special note to include the entire period of time to cure refractory in the start-up definition.

Concurrent with a PSD permit modification to define Start-up, Shutdown (inclusive of times of bed cooling as a normal part of full flow reheat bypass), Cedar Bay submits the following definitions to aptly describe these boiler specific conditions:

(1) A boiler is considered "down" when no solid fuel is being fired and the bed temperature is less than 1400°F. During FFRB, a drop in bed temperature below 1400°F shall be considered down.

(2) Start-up shall be defined as the time between initiation of combustion and 8 hours after the bed temperature reached 1400°F, thereby allowing the cessation of oil firing, including the entire time required for refractory curing following replacement of refractory during an outage , and including the time required to return the bed temperature to normal during FFRB.

As it is Cedar Bay's intention to both facilitate and streamline the Title V permitting process, please do not hesitate to reach me at 751-4000 ext. 22 should any other assistance be needed for completion of this specific section of Cedar Bay's draft Title V.

Sincerely,

Jeffrey A. Walker

Jeffrey A. Walker
Environmental Manager

Cc: T. Cotner, Cedar Bay
M. Golden, Bethesda
W. Alexander, FDEP- Tallahassee

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226
Tel: 904.751.4000
Fax: 904.751.7320

March 3, 1999

Mr. Clair Fancy, Chief
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

RE: Cedar Bay Generating Company, L.P.
Permit No. PSD-FL-137
Site Certification No. PA 88-24
Draft Title V Permit No.: 0310337-002-AV

Dear Mr. Fancy:

Cedar Bay Generating Company (CBGC) has previously obtained authorization from the Department for construction and operation of a dry ash loadout system as an alternative to the pelletizing of ash. The equipment installed included a telescopic discharge chute for loading trucks. The dry ash load out system was designed to control fugitive dust with the installation of a fabric filter/baghouse. This control device is authorized in the current permits and identified in the Title V application under review by the Department. The baghouse acts as a control device for both methods of dry ash load out - railcars and sealed dry bulk pressure-differential trucks.

As discussed with Bruce Mitchell, Mike Halpin and Wendy Alexander of your staff on February 24, 1999, CBCG requests that FDEP recognize the dry ash loading of trucks as an alternate method of operation in the final Title V permit. We believe that is appropriate for the following reasons:

- The source is currently approved in CBCG permits.
- Loading of dry ash to either rail cars or trucks is controlled by the same baghouse.
- The total volume of ash to be loaded remains unchanged.
- CBCG does not propose to increase ash production.
- CBGC has identified several different opportunities for beneficial use of ash which require transportation by truck.
- The estimated emissions remain unchanged. In the Title V application submitted to DEP, we estimated emissions to be 0.61 TPY assuming continuous operation. Actual operations are not continuous and 1998 emissions have been 0.08 TPY (1998 AOR data).

There are no fugitive emissions expected to result from the transportation. The type of trailer used is a sealed dry bulk trailer truck that is completely sealed (schematic enclosed).

The Department has already received comments on the draft Title V permit from CBCG on 2/12/99. We have included the attached table to suggest where to incorporate this alternate operating method into the Title V permit.

Section III, Subsection B *Requested Change*	We request the following changes to the equipment list: *Dry Ash Rail Car Loadout* to *Dry Ash Rail Car/Truck Loadout* *Bed Ash Silo* to *Bed Ash Silo Vent (for transfers to silo and emissions control for loadout via truck)* *Fly Ash Silo* to *Fly Ash Silo Vent (for transfers to silo and emissions control for loadout via truck)* We also request the following changes to the system description: Either ash loadout or ash pelletizing operations are used to process the fly ash and the bed ash generated by the three fluidized bed boilers. Dry ash loadout refers to the loading of dry fly ash and bed ash onto rail cars or trucks. Boiler bed ash is discharged into a surge hopper with overflow going to wheelbarrows. The fly ash is discharged from the boiler flue gas baghouses into hoppers. The bed ash and fly ash are transferred in separate streams through dry cyclone separator/collectors that discharge into silos. The ash may be loaded into railcars or trucks from these silos.
Section III, Condition B4b *Requested Change*	We request the following changes: *b.3. The dry ash loadout system and the pelletizer system shall not be operated simultaneously. Cedar Bay may, however, load trucks via the dry ash loadout system while the pelletizer system is operating, provided that the truck loads are designated for evaluation by a beneficial reuse vendor. Cedar Bay will record the time and quantity of these evaluation loads in a log.* *b.4. The dry ash and pelletized ash shall be loaded onto rail cars or sealed trucks for removal.*

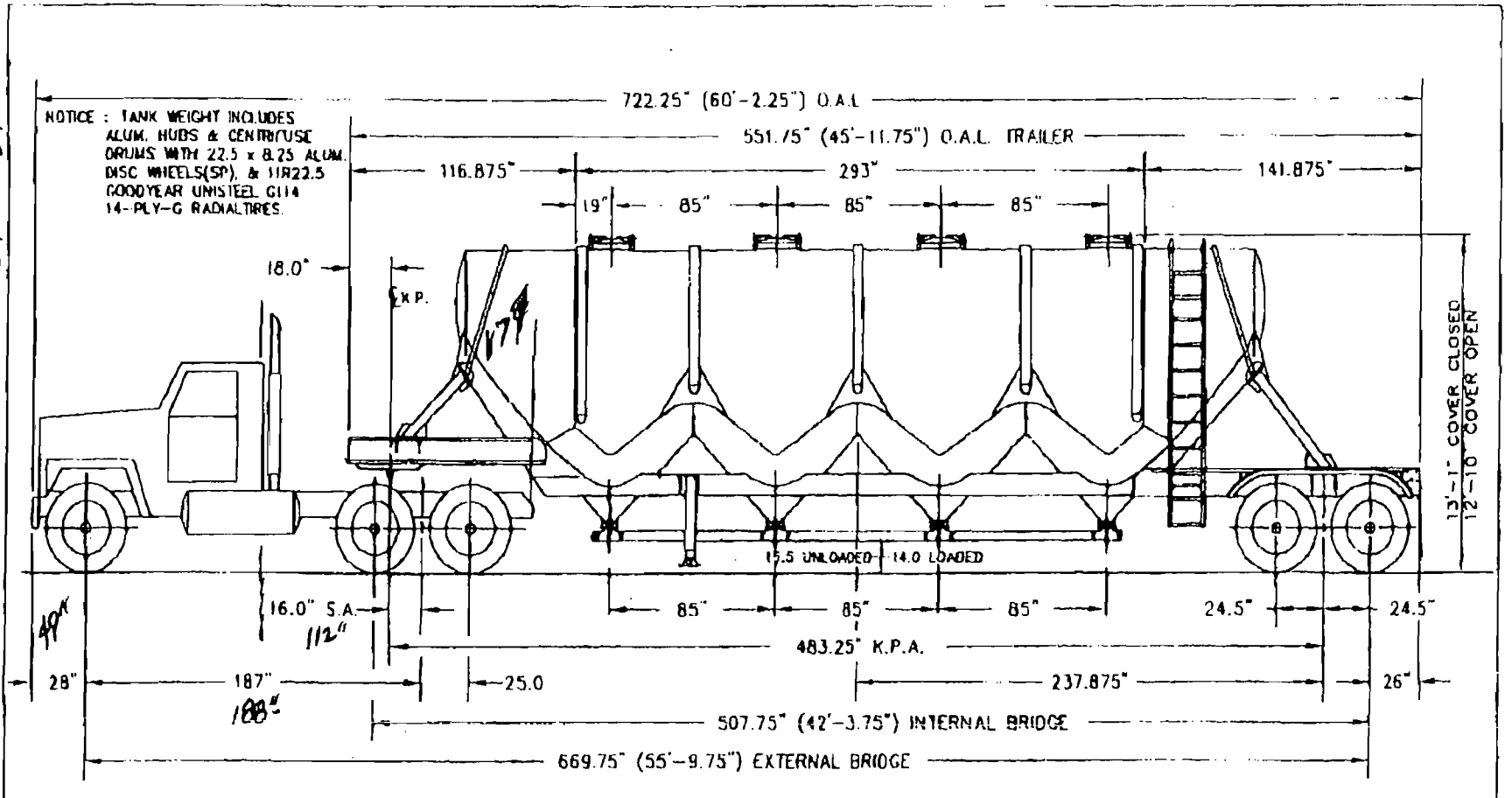
We appreciate your prompt consideration of our request and you may contact Jeff Walker at (904) 751-4000 x22.

Sincerely,

Jeffrey A. Walker

for Timothy J. Cotner
General Manager

C: Hamilton S. Oven, DEP Siting Office
Scott Sheplak, DEP Title V Permits
Bruce Mitchell
Wendy Alexander
Mike Halpin
Jim Manning, Jacksonville RESD (update)



2500	TANK & PAYLOAD	27000	THESE WEIGHTS AND DIMENSIONS ARE NOMINAL AND ARE ESTIMATED AS ACCURATE AS MATERIAL VARIATIONS WILL ALLOW. VERIFICATION OF ACTUAL WEIGHTS FOR SPECIFIC UNITS CAN BE FURNISHED	TANK & PAYLOAD	30250
9500	TRACTOR	7000		RUNGEAR	3750
12000	TOTAL	34000		TOTAL	34000

STOCK AEF

WEIGHT SUMMARY	
TRAILER	9885
TRACTOR	16500
PAYLOAD	53615
GROSS	80000

751B0631

TOLERANCES UNLESS OTHERWISE SPECIFIED: LINEAR .XX ± .03, .XXX ± .010, ANGULAR ± 1°

NOTICE: This print is the property of the HEIL Co. and is returnable at any time. It must not be copied or used directly or indirectly to the detriment of the HEIL Co.

DATE: 03/14/94 SCALE: 1=50

HEIL TRAILER INTERNATIONAL

TITLE: SUPER JET MODEL 1600 ALUMINUM DRY BULK TRAILER

DRAWN BY: MGR

PART No. 751B0631

Stone Container Corporation
Containerboard and Paper Division

P.O. Box 26998
Jacksonville, Florida 32226-6998
904-751-6400

November 4, 1998

File Duval County

Department of Environmental Protection
Northeast District Air Program
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590

Re: Facility ID No.: 0310067, Current Air Operating Permits AC16-222359PSD-FL-198, AO16-233873 0310067-002-AC, and 0310067-003-AV

Dear Mr. Frey:

We are writing to inform you of a transaction between Stone Container Corporation ("Stone Container") and Jefferson Smurfit Corporation ("JSC"). For its facility at 9469 Eastport Road, Jacksonville, Florida 32218, Stone Container has Industrial Facility Permit, and Current Air Operating Permits (same as above), from your agency. We are sending you this notice for informational purposes, not because of a legal requirement.

On or about November 18, 1998, Stone Container plans to merge with a subsidiary of JSC. After that merger, Stone Container will be the surviving entity and will be a wholly-owned subsidiary of JSC. Stone Container Corporation will not change its legal name, but will do business as Smurfit-Stone Container Corporation. While the merger will result in JSC owning all of Stone Container's stock, Stone Container will continue to directly own, operate and control its current facilities.

Please let us know if you have any questions or believe any further action should be taken concerning this permit. We appreciate your attention.

Sincerely,

STONE CONTAINER CORPORATION
Jacksonville Mill

John L. West, General Manager

cc: Christopher L. Kirts

Post-it® Fax Note 7671	Date 3/1/99	# of pages ▶ 1
To Wendy Alexander	From Deneen	
Co./Dept. DARM	Co. NED/JAX-AIR	
Phone #	Phone # SC 886-4310	
Fax # 922-6979	Fax #	

jemnpl-1

Wendy Alexander

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226

Tel: 904.751.4000
Fax: 904.751.7320

February 12, 1999

Mr. Scott M. Sheplak, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Cedar Bay Cogeneration, L.P. Operating Permit Comments
Draft Title V Permit No.: 0310337-002-AV

Dear Mr. Sheplak:

Enclosed are our comments and requested changes to the Cedar Bay Cogeneration Title V Operating Permit, which has been released as draft Permit No. 0310337-002-AV.

The changes are being requested in order to clarify the requirements of the current preconstruction permit, PSD-FL-137, and reflect changes to some insignificant activities.

The comments are being made in order to clarify the status of some permit requirements (*e.g.* when the requirement is satisfied and no further action is required), or to document the procedures Cedar Bay Cogeneration is using to comply with the requirement.

Our requested changes and comments are listed in the order of the permit conditions, and refer to specific conditions as numbered in the draft permit.

Concurrent with the response to the draft Title V, Cedar Bay is submitting a PSD modification request. It is our intention to minimize the administrative burden on both the FDEP and Cedar Bay by requesting that the final Title V permit be timed to capture the changes expected to occur.

If you have any questions, please do not hesitate to contact A.J. Jablonowski at (978) 371-4339 or me at (904) 751-4000.

Very truly yours,

Timothy Cotner
General Manager

cc: A Jablonowski, Earth Tech 196 Baker Avenue Concord MA 01742
Michelle Golden, US Generating 7500 Old Georgetown Road Bethesda MD 20814
Ray Kenison, US Generating Company 1 Bowdoin Street Boston MA 02114
Lauren Freeman, Hunton & Williams 1900 K Street N.W. Suite 1200, Washington D.C. 20006

Certification Statement Per the request of FDEP, we are providing the following certification of the information contained in this comment letter.

> "I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete."

Name: Timothy Comer
Title: General Manager

REQUESTED CHANGES AND COMMENTS REGARDING CEDAR BAY COGENERATION PLANT DRAFT TITLE V PERMIT NO. 0310337-002-AV

Condition	Requested Change/Comment
General Comment	Several conditions in this application are word-for-word transcriptions of federal or Florida regulatory requirements. We are concerned that, when the underlying requirements are modified, the permit conditions will become out-of-date. If possible, we would prefer that the permit cite the federal and Florida requirements without a full transcription, to avoid this problem. This would not need to be done for the PSD permit requirements.
General Comment	Conditions which reference the PSD permit do not reference any specific condition in the PSD permit. For ease of reference by both the applicant and the Department, we request that references to the PSD permit reference specific conditions in that permit.
General Comment	Several conditions cite 62-213.440 Permit Content, or 62-210.200 (PTE), in addition to the PSD permit. These regulations were already met by obtaining the PSD permit, and including them as references in the Title V permit could be confusing. We request that these references be removed.
Statement Of Basis *Requested Change*	The permit references attachments to be made a part of the permit. One of these attachments is the Jackson Environmental Protection Board Rule 2: Air Pollution Control. This rule has many provisions that do not apply to our facility. We request that the permit not include these regulations in their entirety, but instead reference the specific provisions that apply, in the specific Title V permit conditions where they apply. In particular, Part VI (Gasoline Vapor Control) does not appear to apply to our facility.
Section I, Subsection A *Requested Change*	There are situations when the CFB Boilers may fire No. 2 fuel oil during periods that do not qualify as start-up and shutdown. For example, No. 2 fuel oil may be used to stabilize combustion during load changes. We request that the phrase "for periods of start-up and shutdown" be removed from the description. Also, Stone Container Corporation has changed its name to Smurfit Stone Corporation.
Section II, Condition 5. *Comment*	We are requesting changes to Appendix I-1, Insignificant Emissions Units and/or Activities, to reflect revised facility operation. We are requesting the addition of insignificant activities to Appendix I-1, as discussed at the end of this letter.
Section II, Condition 8 *Requested Change*	This condition cites the visible emission standard in 62-296.320(4)(b)1.&4., without citing the exceptions and alternative standards in 62-296.320(4)(b)2 and 62-296.320(4)(b)3. We request that the condition either be removed or that the exceptions and alternative standards be added.
Section II, Condition 9 *Comment*	The facility uses water spray and wetting during periods when such precautions are necessary to prevent emissions of unconfined particulate matter. Such precautions are not always necessary. We interpret this condition to be consistent with our current practice of using water spray and wetting only when necessary.
Section II, Condition 9 *Requested Change*	Please correct the permitting note to refer to Condition 9, not Condition 8.
Section II, Condition 11 *Requested Change*	The permit references attachments to be made a part of the permit. One of these attachments is the Jackson Environmental Protection Board Rule 2: Air Pollution Control. This rule has many provisions that do not apply to our facility. We

	request that the permit not include these regulations in their entirety, but instead reference the specific provisions that apply, in the specific Title V permit conditions where they apply. In particular, Part VI (Gasoline Vapor Control) does not appear to apply to our facility.
Section II, Condition 14 *Requested Change*	We request that this condition be removed, since the permit already requires compliance with Subpart A of the NSPS (including the modification notification requirements). The facility will comply with the notifications requirements in 60.7(a)(4), which states: *The permittee shall give notification to the Department of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under the applicable subpart of Section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control system, productive capacity of the facility before and after the change.* The requirement in 60.7(a)(4) would appear to be the applicable modification notification requirement. The currently cited provision (40 CFR 60.14) does not include the notice requirement currently listed in this permit condition. We are concerned that the requirement for "sufficient" notice currently listed in this permit condition is ambiguous.
Section III, Subsection A *Requested Change*	The CFB boilers are subject to federal New Source Performance Standards (NSPS) as well as the conditions of the PSD permit. We agree with Condition A61 which states that where the requirements within the Title V permit are more restrictive, they shall apply instead of the NSPS limits. Unfortunately, the facility is still required to perform several monitoring, recordkeeping, and reporting requirements specific to the NSPS requirements. These monitoring, recordkeeping, and reporting requirements do not apply to the PSD permit limits. In order to make it clear what these monitoring, recordkeeping, and reporting requirements refer to, we suggest that the PSD permit requirements be re-introduced into the permit. We suggest listing (or referencing) each limit, and using a permit note to indicate the requirements that apply to this limit. This could be done using the following format: *No owner or operator shall cause to be discharged into the atmosphere from any emissions unit any gases which contain particulate matter in excess of: (1) 0.03 lb/million Btu heat input; or (2) 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel (coal).* *[40 CFR 60.42a(a)(2)]* *No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts solid fuel or solid-derived fuel any gases which contain sulfur dioxide in excess of: (1) .0.60 lb/million Btu heat input; or (2) 30 percent of the potential*

	combustion concentration (70 percent reduction). *[40 CFR 60.43a(a)(2)]* *No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts liquid fuel any gases which contain sulfur dioxide in excess of 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 0.20 lb/MMBtu heat input.* *[40 CFR 60.43a(b)(2)]* *No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of the following emission limits.* *(1) NO_X emission limits* *0.60 lb/MMBtu heat input (based on a 30-day rolling average)* *(2) NO_X reduction requirement (based on a 30-day rolling average).* *a. Solid fuels: 65 percent reduction of overall concentration* *b. Liquid fuels: 30 percent reduction of overall concentration* *[40 CFR 60.43a(b)(2)]* *{permitting note: conditions A15-A18, A21-28, A34, A35, A38, A39, and A49-A56 apply to documenting compliance with the limits set forth in the above conditions.}* We would like to discuss the best strategy for keeping the NSPS and the PSD monitoring and recordkeeping requirements separate.
Section III, Subsection A *Requested Change*	There are situations when the CFB Boilers may fire No. 2 fuel oil during periods that do not qualify as start-up and shutdown. For example, No. 2 fuel oil may be used to stabilize combustion during load changes. We request that the phrase "for periods of start-up and shutdown" be removed from the description.
Section III, Subsection A *Requested Change*	We request that the text in the permitting note change to indicate that the following are approximate values: "exit temperature = approx. 265 °F, actual volumetric flow rate = approx. 1,004,000 acfm."
Section III, Condition A3b *Requested Change*	The PSD permit states that No. 2 fuel oil shall normally only be used for startups. There are situations when the CFB Boilers may fire No. 2 fuel oil during periods that do not qualify as start-up and shutdown. For example, No. 2 fuel oil may be used to stabilize combustion during load changes. We request that the phrase "shall be used only for startup and shutdown" be changed to "shall normally be used only for startups," to provide consistency with the PSD permit.
Section III, Condition A3b *Requested Change*	The short-term maximum oil usage limit of 8,000 gals/hr was listed in the PSD permit only in PSD Condition II B 3, where it is referenced as an indication that the VOC emissions are not significant. This "maximum" firing rate is actually a calculated firing rate based on the maximum heat input and an assumed heat content for fuel oil. Depending on the actual heat fuel oil, the facility could fire more than 8,000 gals/hr and still comply with the maximum heat input as listed in PSD Permit Condition II A 1 e., and Title V Condition A1. We request that the short-term oil usage limit be removed.
Section III,	This condition provides information about the permitted activities but is not a limit

Condition A3d *Requested Change*	that must be enforced. We request that this condition be changed to a permit note.
Section III, Condition A5 *Requested Change*	We request that footnote 3 change to the following: 3 hour rolling average, except for initial and annual compliance tests, which will be the average of three one-hour tests. (Cedar Bay is submitting a PSD modification to lower the Sox limit to .22 lbs/mmBtu on a 24 hour block average)
Section III, Condition A5 *Requested Change*	We request the following clarifications for the averaging time footnotes: *1. Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when compliance is measured based on the average of three 1-hour tests.* *2. Thirty-day rolling average* 3. [see above]. *4. Twelve-month rolling average.*
Section III, Condition A6 *Requested Change*	We suggest the following rewording of the last sentence of this condition: *Because CFB Boilers A, B & C share a common stack, visible emissions violations measured by testing at the common stack will be attributed to each unit for which there are no data available from an opacity meter showing that the specific unit was in compliance with the opacity standard at the time of the test.*
Condition A7: *Comment*	The facility documents compliance with this condition as follows. The train load percent sulfur limit is certified by the fuel supplier and fuel supplier records are maintained at the facility. Compliance with the annual average is determined from records of daily as-fired fuel analyses. The No. 2 fuel oil sulfur limit is certified by the fuel supplier and fuel supplier records are maintained at the facility.
Conditions A9-A12: *Requested Change*	Other conditions ensure that the statements in A9-A12 are true, and the PSD permit conditions that Conditions A9-A12 were taken from simply documented that the facility met Best Available Control Technology. We request that the language in Conditions A9-A12 be changed to a permit note.
Section III, Condition A13 *Comment*	We are discussing the contents of Appendix PSS-1 directly with the AWQD.
Section III, Conditions A22-A28 *Comment*	Conditions A22-A28 - These are the NSPS CEMS requirements. These requirements and procedures apply for the documentation of compliance with the federal NSPS requirements of 40CFR60 Subpart Da, but do not apply for the documentation of compliance with the limits in the PSD permit.
Section III, Condition A29 *Requested Change*	We request addition of the following performance specification: *(4) Performance Specification 4A—Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources.*
Section III, Conditions A32 *Comment*	Because this condition is based on the site certification requirements, it may not be federally enforceable.
Section III, Conditions A33 *Requested Change*	We request that EPA Method 3B be included in the list of acceptable test methods. Method 3B is an equivalent method of determining molecular weight and percent O_2, and is specifically required by Condition A26, A27, A28, and A34. We also

	request that EPA Method 29 be included as an acceptable test method for lead, mercury, and beryllium.
Condition A36-A37: *Comment*	Because these conditions reference Florida, federal, and PSD permit requirements, we are concerned that it will be difficult to confirm which test methods are appropriate for documenting compliance with which applicable requirements.
Section III, Condition A43 and A45 *Requested Change*	These test procedures apply to state-required testing and do not apply to federal New Source Performance Standards testing. We request the addition of the following language: *Note: these test procedures apply to state-required testing and do not apply to federal New Source Performance Standards testing.*
Section III, Condition A45: *Requested Change*	This requirement mixes references to the Department (Florida DEP) and AWQD (Jacksonville). We request that this condition change to refer to only one authority. We would prefer a reference to an agreement which formalizes the enforcement authority of each regulatory agency, that could be referenced as part of this condition.
Section III, Condition A46 *Requested Change*	We request that this condition also apply to the CO compliance test requirements. In addition, in order to make clear which provisions of Rule 62-297-310 must be satisfied (since that rule contains requirements what will not be applicable to every test), we suggest the condition be revised to cite the specific requirements of concern. We suggest the following language: *The permittee may use CEM RATA tests for SO2, NOx, and CO to satisfy the compliance testing requirements in this permit provided the permittee satisfies the applicable notice and submission requirements in Rule 62-297.310, subsection (7)(a)(9) and (8).*
Section III, Condition A47 *Requested Change*	This reporting requirement applies to state limits only and does not apply to federal New Source Performance Standards limits. We request the addition of the following language: *Note: these reporting procedures apply to state limits and do not apply to federal New Source Performance Standards limits.*
Section III, Condition A48 *Requested Change*	These test report requirements apply to state limits only and does not apply to federal New Source Performance Standards limits. We request the addition of the following language: *Note: these test reporting procedures apply to state limits and do not apply to federal New Source Performance Standards limits.*
Section III, Condition A49-A56 *Requested Change*	We request a permit note prior to these conditions indicating that these conditions refer to the content of the quarterly emissions reports documenting compliance with the federal NSPS limits.
Section III, Condition A58 *Requested Change*	We request that the phrase "an operation log" be replaced with "records." We plan to use computer records from our control system to comply with this requirement. We believe this change is consistent with the language and intent of the applicable recordkeeping requirements in the PSD permit.
Section III,	Other conditions ensure that the statements in A63 are true, and the Department

Condition A63: *Requested Change*	letter simply documented that the facility met Best Available Control Technology. We request that the language in Conditions A63 be changed to a permit note.
Section III, Subsection B *Requested Change*	We request the insertion of the following information into the flow conditions table: *Pulverized Limestone feeders (6): Emission Point Height: 50 ft* *Exit Temp. 77(F), Actual Volumetric Flow Rate N/A, Maximum Though-Put Rate 365 acfm*
Section III, Subsection B *Comment*	There are some slight inconsistencies in the naming of some emission points between the PSD permit and the draft Title V permit. For example, source -011 is alternatively called "Bed Ash Separator/Collector" and "Bed Ash Separator." Since there does not appear to be any difficulty in ascertaining which piece of equipment is being referred to in each case, we do not believe any changes are necessary.
Section III, Condition B2 *Requested Change*	This condition simply refers to condition B19. We request its deletion.
Section III, Condition B4a *Comment*	CBC would like to maintain the right to burn a cleaner fuel (*e.g.* kerosene) in the limestone dryers. We interpret the condition to allow the use of cleaner distillate fuels.
Section III, Condition B17: *Comment*	Because these conditions reference Florida, federal, and PSD permit requirements, we are concerned that it will be difficult to confirm which test methods are appropriate for documenting compliance with which applicable requirements.
Section III, Condition B23: *Requested Change*	This requirement mixes references to the Department (Florida DEP) and AWQD (Jacksonville). We request that this condition change to refer to only one authority. We would prefer a reference to an agreement which formalizes the enforcement authority of each regulatory agency, that could be referenced as part of this condition.
Section III, Condition B24 *Requested Change*	This reporting requirement applies to state limits only and does not apply to federal New Source Performance Standards limits. We request the addition of the following language: *Note: these reporting procedures apply to state limits and do not apply to federal New Source Performance Standards limits.*
Section III, Condition B25 *Requested Change*	These test report requirements apply to state limits only and do not apply to federal New Source Performance Standards limits. We request the addition of the following language: *Note: these test reporting procedures apply to state limits and do not apply to federal New Source Performance Standards limits.*
Section III, Condition B26 *Requested Change*	We request modification of this requirement to indicate "records" instead of "operation log." CBC plans to use computer operating system records to comply with the limestone operating hours limit. We request the removal of the recordkeeping requirement for the ash handling, because the ash handling system is permitted to run continuously (8,760 hours/year).
Section III, Condition B27	CBC interprets this condition to apply to those sources with federal NSPS requirements, *i.e.* the limestone handling system.

Comment	
Section III, Condition C2 *Requested Change*	This condition simply refers to condition C16. We request its deletion.
Section III, Condition C6b *Comment*	The facility uses water sprays during periods when such precautions are necessary to prevent emissions of unconfined particulate matter. Such precautions are not always necessary; the coal sometimes is wet enough to make additional wetting superfluous. We interpret this condition to be consistent with our current practice of using water sprays only when necessary.
Section III, Condition C20: *Requested Change*	This requirement mixes references to the Department (Florida DEP) and AWQD (Jacksonville). We request that this condition change to refer to only one authority. We would prefer a reference to an agreement which formalizes the enforcement authority of each regulatory agency, that could be referenced as part of this condition.
Table 1-1 and 2-1 *Requested Change*	In Table 1-1, we have found some differences between the "Equivalent Emissions" presented and the emissions we calculate from the airflow and particulate loading. In most cases, the differences are minor and may not need to be incorporated into the permit. We would like to review these calculations with FDEP. In Table 2-1, we request the compliance method for Boilers A, B, and C particulate matter testing be changed from "EPA method 15 or 17" to "EPA method 5 or 17." This appears to be a typographical error.
Appendix TV-2, Condition 52 *Requested Change*	As written, the Condition, which attempts to paraphrase the regulatory requirement, is not consistent with the actual regulation. We request this condition be replaced with the following language from the Florida rules: *Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statements shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. In addition, the statement of compliance status shall include all the provisions of 40 CFR 70.6(c) (5) (iii), incorporated by reference at Rule 62-204.800, F.A.C. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.*
Appendix I-1 *Requested Change*	ICLP requests that the following activities be added to the List of Insignificant Units and/or Activities: Parts Washers These units are exempt from permitting per 62-210.300(3)(x) "Degreasing units using heavier-than-air vapors exclusively, except any such unit using HAP." Cooling Tower This system has potential emissions below the thresholds of 62-213.430(6). Emergency Diesel Boiler Feed Pump This pump qualifies as an emergency general purpose diesel engine operating less than 400 hours per year, per 62-213.430(t). Also, we request that insignificant activity 14 (Maintenance) be modified to specifically include metalworking and soldering.

Appendix I-1 and Appendix U-1 *Requested Change*	There is a single emergency diesel fire pump on-site. We believe that insignificant activity 20, which currently reads "Diesel Fuel Pump," should actually read "Diesel Fire Pump." Also, the diesel fire pump appears to be listed twice in Appendix U-1. To eliminate confusion, we request that the fire pump be listed once in the most appropriate appendix, and that the other references be deleted.

Cedar Bay Generating Company, L.P.

Memorandum

To:	Wendy Alexander	**Date:**	February 11, 1999
Subject:	Emission Unit Descriptions	**From:**	Jeff Walker
Copies:	Michelle Golden	**File:**	Titlev

Wendy

To clear up any confusion on the descriptions of the Emission Units I suggest the following:
EU ID No. 012, 026 Fly Ash Separators/Collectors
EU ID No. 013 Pelletizer Bed Ash Receiver Bin
EU ID No. 014 Pelletizer Fly Ash Receiver Bin
EU ID No. xxx Bed Ash Silo Vent
EU ID No. xxx Fly Ash Silo Vent

These descriptions should clarify the origins of each emission unit. I believe all others are aptly named.

Thank You
Jeff Walker

Subsection B. Summary of Emissions Unit ID Numbers and Brief Descriptions.

E.U. ID No.	Brief Description	Control Device
-001	Circulating Fluidized Bed Boiler A - 1063 MMBtu/hour	
-002	Circulating Fluidized Bed Boiler B - 1063 MMBtu/hour	
-003	Circulating Fluidized Bed Boiler C - 1063 MMBtu/hour	
-004	Absorber Dryer System Train - 1 (Dryer and Handling System)	*Baghouse LA-1*
-005	Absorber Dryer System Train - 2 (Dryer and Handling System)	*Baghouse LB-1*
-006	Coal Crusher Building	*Baghouse C-1*
-007	Coal Silo Conveyor	*Baghouse C-2*
-009, -025	ADS Storage Bins (1 & 2)	*Baghouse LA-2 & LB-2*
-010	Bed Ash Hopper	*Baghouse A-1*
-011	Bed Ash Separator/Collector	*Baghouse A-2*
-012, -026	Fly Ash Separators (1 & 2)	*Baghouse A-4 & A-5*
-013	Bed Ash Receiver Bin	*Baghouse A-7*
-014	Fly Ash Receiver Bin	*Baghouse A-8*
-015	Pellet Vibratory System	*Baghouse A-17*
-016	Pellet Recycle Tank	*Baghouse A-10*
-017	Pelletizing Recycle Hopper	*Baghouse A-9*
-018	Cured Pellet Screening Conveyor System	*Baghouse A-14*
-019	Pellet Recycle Conveyor	*Baghouse A-16*
-020	Coal Car Unloading	*Water Spray CF-1*
-021	Ash Pellet Hydrator	*Scrubber A-11*
-022	Ash Pellet Curing Silos	*Scrubber A-13*
-023	Ash Pelletizing Pans	*Scrubber A-12*
-029	Pellet Railcar Loadout	*Baghouse A-15*
-030	Dry Ash Rail Car Loadout	*Baghouse A-18*
-xxx	Pulverized Limestone Feeders (6)	*Vent Filters L-1 to L-6*
-xxx	Bed Ash Silo	*Vent Filter A-3*
-xxx	Fly Ash Silo	*Vent Filter A-6*

Please reference the Permit Number, the Facility Identification Number, and the appropriate Emissions Unit(s) ID Number(s) on all correspondence, test report submittals, applications, etc.

of business licenses as required by State Statutes.

The FKAA reserves the right to reject all Submittals where the FKAA deems rejection to be in the best interest, or to reject any Proposal not in accordance with the Contract Documents. The FKAA reserves the right to waive any informalities and irregularities in said Submittals.

Dated this 4 day of January, 1999.

FLORIDA KEYS AQUEDUCT AUTHORITY

By
J.T. Doughtry
Executive Director

By
James C. Reynolds, P.E.
Deputy to the Executive Director

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Title V DRAFT Permit No.: 0310337-002-AV
Cedar Bay Cogeneration Facility
Duval County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Cedar Bay Generating Company, L.P. for the Cedar Bay Cogeneration Facility located at 9640 Eastport Road, Jacksonville, Duval County. The applicant's name and address are: Cedar Bay Generating Company, L.P., 9640 Eastport Road, Jacksonville, FL 32226.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S, must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address and telephone number of the petitioner; name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so state;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief; and

(f) A demand for relief.

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

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

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

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

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Affected District/Local Programs:
City of Jacksonville
Regulatory and Environmental Services Department,
Air and Water Quality Division
421 West Church Street, Suite 422
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484
Fax: 904/630-3638

Department of Environmental Protection
Northeast District Office
7852 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
Telephone: 904/448-4300
Fax: 904/448-4363

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.

FLORIDA

Department of Environmental Protection

Lawton Chiles
Governor

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

Kirby B. Green, III
Secretary

Memorandum

TO: Gracy R. Danois

FROM: Wendy Alexander

DATE: November 25, 1998

SUBJECT: Application Revision for a Title V Operation Permit for Cedar Bay Generating Company, L.P., Cedar Bay Cogeneration Facility, Facility ID 0310337

Please add the enclosed page to the Facility and Source Specific Regulatory Applicability and Compliance Evaluation table (attachment CBO1) in the revised Title V application for the Cedar Bay Cogeneration Facility, Facility ID 0310337.

If there are any questions regarding this request, please call Wendy Alexander, project engineer, at Suncom 291-9527. Thank you.

Enclosures

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226
Tel: 904.751.4000
Fax: 904.751.7320

January 14, 1999

Scott M. Sheplak
Bureau of Air Regulation, D.E.P.
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Draft Title V Permit No.: 0310337-002-AV
Cedar Bay Co-Generation Facility

Dear Mr. Sheplak:

Pursuant to the Department of Environmental Protection's request, the original and one copy of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" is enclosed. The Public Notice was published in *The Florida Times Union* on January 12, 1999. Mr. Steve Smith, Legal Advisor of *The Florida Times Union* was Cedar Bay's point of contact.

If you have any questions concerning the Public Notice or need any additional information, please contact me at (904) 751-4000 extension 22.

Sincerely,

Jeffrey A. Walker
Environmental Manager

Enclosures

cc: Valerie Gill, Bethesda
Tim Cotner, Cedar Bay

Wendy,

Text describing FFRB as it relates to startup/shutdown. I also have a 1-page description for FFRB which is slightly more technical in describing the operation. What is your fax number?

Startup and shutdown of the Cedar Bay CFB boilers are a normal part of routine operation of the facility. During boiler startup, the circulating inert bed material is heated using fuel oil until a bed temperature of 1000?F is reached, at which time the introduction of solid fuel (coal) into the boiler is initiated. Fuel oil firing continues until the bed reaches a combustion-sustaining temperature of approximately 1400?F. Normal operating temperature of the boiler bed is between 1650 and 1750?F. Generally, it takes approximately 12-14 hours from initial fuel oil firing for a cold-condition Cedar Bay CFB unit to reach full operation, and three to four hours from coal-firing initiation to full operation.

When the bed temperature is below 1400?F, the fuel is not completely combusted and CO emissions can be considerably higher than permitted limits on a both a heat input (i.e., lb/MMBtu) and mass (lb/hr) basis. Furthermore, since compliance with the CO emission limits is determined on an 8 hour rolling average basis, the potential exists for any average CO emission rate determined less than 8 hours after a boiler reaches 1400?F to be above permitted limits.

Full flow reheat bypass is an operating condition in which the Cedar Bay facility is supplying up to 380,000 lb/hr of process steam to the adjacent Seminole Kraft facility while the steam turbine is out of service. This is accomplished by bypassing steam from the main steam piping to the reheater sections of a boiler. The system is duplicated in each of the three boilers to offer the maximum degree of flexibility and redundancy.

In order to bring a CFB into FFRB, the boiler must first be shut down, then restarted firing fuel oil. Therefore, the transition of a CFB into FFRB should be considered a startup condition. Similarly, the boiler must be shut down and restarted to switch from FFRB to normal operation with the turbine on. Furthermore, due to the low, variable steam demand from Smurfit-Stone Container and corresponding fuel loading during FFRB, the CFB bed is likely to occasionally cool to below 1400°F, thereby requiring supplemental oil firing with a corresponding increase in CO emissions. In other words, the CFB is again in transition to sustainable coal firing temperatures, and is therefore in startup condition. However, FFRB can be operated at sustainable coal firing temperatures for an extended period given sufficient, consistent steam demand from Smurfit-Stone Container. FFRB would therefore be treated as normal operation with corresponding applicable requirements unless a shutdown/startup condition as described in this paragraph occurs.

? I think this would be flame stabilization mode rather than start-ups. In which case, excess emissions due to start up would not be allowed.

==========
Keith Field --- (256) 767-1210 --- kfield@ensr.com
Project Manager
ENSR Florence Client Service Center
2809 W. Mall Drive
Florence, AL 35630
FAX (256) 767-1211
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Cedar Bay Generating Company, L.P.

Cedar Bay Generating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226
Tel: 904.751.4000
Fax: 904.751.7320

October 2, 1998

Scott Sheplak
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

RE: Cedar Bay Generating Company, Jacksonville
Revisions to Title V Application
ENSR Project Proposal Number

Dear Mr. Sheplak:

Enclosed are revisions to the Title V Application for the Cedar Bay Cogeneration Plant in Jacksonville. These pages replace the corresponding pages in the original application submittal, and are divided into three parts:

- Introduction (entire section)
- Forms (replacement pages)
- Attachment CB01 (entire section)

Please substitute these pages accordingly. If you have any question or comments, please call either Jeff Walker at (904) 751-4000 ext. 22, or Keith Field at ENSR (256) 767-1210. Thank you.

Sincerely,

Randy M Cole
for Tim Cotner
Plant Manager

Jeff Walker
Jeff Walker
Environmental Manager

enclosure
T5Revlet.doc
cc: Michelle Golden

RFC-822-headers:
Received: from ma01.ensr.com by EPIC66.DEP.STATE.FL.US (PMDF V5.0-8 #7204)
 id <01J2EWEE89JK0020BZ@EPIC66.DEP.STATE.FL.US> for
 ALEXANDER_W@dep.state.fl.us; Wed, 30 Sep 1998 10:00:32 -0400 (EDT)
Received: by ma01.ensr.com with VINES-ISMTP; Wed,
 30 Sep 1998 10:02:31 -0400 (EDT)
X-Incognito-SN: 541
Errors-to: kfield@ensr.com
X-Priority: 5 (Low)
X-Incognito-Version: 4.25.242

Date: 9/30/98 10:02:38 AM
From: Keith Field
Subject: Full Flow Reheat Bypass

Wendy,

Text describing FFRB as it relates to startup/shutdown. I also have a 1-page description for FFRB which is slightly more technical in describing the operation. What is your fax number?

Startup and shutdown of the Cedar Bay CFB boilers are a normal part of routine operation of the facility. During boiler startup, the circulating inert bed material is heated using fuel oil until a bed temperature of 1000?F is reached, at which time the introduction of solid fuel (coal) into the boiler is initiated. Fuel oil firing continues until the bed reaches a combustion-sustaining temperature of approximately 1400?F. Normal operating temperature of the boiler bed is between 1650 and 1750?F. Generally, it takes approximately 12-14 hours from initial fuel oil firing for a cold-condition Cedar Bay CFB unit to reach full operation, and three to four hours from coal-firing initiation to full operation.

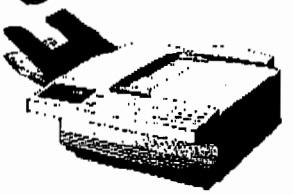
When the bed temperature is below 1400?F, the fuel is not completely combusted and CO emissions can be considerably higher than permitted limits on a both a heat input (i.e., lb/MMBtu) and mass (lb/hr) basis. Furthermore, since compliance with the CO emission limits is determined on an 8 hour rolling average basis, the potential exists for any average CO emission rate determined less than 8 hours after a boiler reaches 1400?F to be above permitted limits.

Full flow reheat bypass is an operating condition in which the Cedar Bay facility is supplying up to 380,000 lb/hr of process steam to the adjacent Seminole Kraft facility while the steam turbine is out of service. This is accomplished by bypassing steam from the main steam piping to the reheater sections of a boiler. The system is duplicated in each of the three boilers to offer the maximum degree of flexibility and redundancy.

In order to bring a CFB into FFRB, the boiler must first be shut down, then restarted firing fuel oil. Therefore, the transition of a CFB into FFRB should be considered a startup condition. Similarly, the boiler must be shut down and restarted to switch from FFRB to normal operation with the turbine on. Furthermore, due to the low, variable steam demand from Smurfit-Stone Container and corresponding fuel loading during FFRB, the CFB bed is likely to occasionally cool to below 1400°F, thereby requiring supplemental oil firing with a corresponding increase in CO emissions. In other words, the CFB is again in transition to sustainable coal firing temperatures, and is therefore in startup condition. However, FFRB can be operated at sustainable coal firing temperatures for an extended period given sufficient, consistent steam demand from Smurfit-Stone Container. FFRB would therefore be treated as normal operation with corresponding applicable requirements unless a shutdown/startup condition as described in this paragraph occurs.

==========
Keith Field --- (256) 767-1210 --- kfield@ensr.com
Project Manager
ENSR Florence Client Service Center
2809 W. Mall Drive
Florence, AL 35630
FAX (256) 767-1211
==========

ENSR



Facsimile Cover Sheet

TO:	Wendy Alexander Name	Florida DEP DARM Firm/Location	850) 922-6979 Fax Number
FROM:	Keith Field Name	Florence Division/Dept.	233 Tel. Ext.
	September 30, 1998 Date	1:42PM Time	
RE:	FFRB		

COMMENTS:

RECEIVED

SEP 30 1998

BUREAU OF AIR REGULATION

Cover Page + 1 Pages

Accounting No: 5402-090-200

Call **(256) 767-1210** regarding problems with this transmission

2809 West Mall Drive
Florence, AL 35630
(256) 767-1210
FAX (256) 767-1211

	INTEGRATED UNIT OPERATION	FILE NO. 15637.95.2000
	COLD STARTUP	CB 121592-0

Appendix F
Full Flow Reheat Bypass Operation

F.1 System Operating Description

The procedures included in Appendix F are supplementary to and should be used in conjunction with integrated unit operation procedures contained herein.

Reheater cooling steam flow is required in order for one boiler to produce 380,000 lb/h process steam for Seminole Kraft (S-K) with the turbine out of service. The full flow reheat bypass system permits bypassing steam from the main steam piping near the outlet of Superheater III to the cold reheat piping near the inlet to Reheater I and then passing this steam through both reheater sections. Several intermediate stages of desuperheating are included. The steam from the outlet of Reheater II is cooled to 750 F and transported to an interconnection with the process steam supply piping.

This system is duplicated for each of the three boilers to offer maximum redundancy and optimum operation/maintenance flexibility. The boiler heat input required for 380,000 lb/h process steam at the S-K fence line will be high enough to operate on solid fuel only. Supplemental oil firing will be required during transition to and from full flow reheat bypass operation. Only one boiler at a time should be operated in the full flow reheat bypass mode. It is estimated that one boiler can be operated to produce as low as 250,000 lb/h process steam while firing only solid fuel.

The allowable reheater operating pressure while in the full flow reheat bypass mode is 720 psig (rather than 520 psig) because allowable pressure is temperature dependent and the reheater operation is limited to lower temperatures in this mode. Process steam Valve 1PSD-ABV-50 closes when the turbine trips to prevent over-pressure in the reheater prior to bringing reheater temperature down. Boiler reheater block valves will automatically close on a reheater protection trip and will remain closed during full flow reheater bypass operation. The block valves required to put the bypass system in service to supply process steam are power operated to allow remote manual operation from the control room.

Each boiler is provided with a power operated reheater vent valve and silencer which should be used to facilitate steam flow through the selected boiler's reheater upon turbine trip. These reheat vent valves are also used to help warm the inter-connecting pipe between the hot reheat system and the process steam system.

STATE OF FLORIDA, DEP, BUREAU OF AIR REGULATION, TITLE V SECTION

TELEPHONE CONVERSATION RECORD

TO: Subject files

FROM: SCOTT SHEPLAK

DATE: 09/11/96 TIME: ~2pm.

WITH: Mr. Don Beckham

REPRESENTING: V.S. Generating

TELEPHONE NO.: ?

SUBJECT: CedarBay (ID# 0310337)

Indiantown (ID# 0850102)

"Start up / Shutdown / Malfunction"

SUMMARY: Mr. Beckham called asking about the subject matter. He wanted to know if a Title V Source can define "start up / shutdown" and request that the definition be included in TV permit. He may have defined in recent TV application and included best operational practices. He wanted to know if he can do this in TV permit. I advised that the agency is not required to define "start up / shutdown / malfunction" or include best operational practices in TV permit. It may be possible for the agency to put in TV permit as "Applicant request." According to him, they have coordinated development of "start up / shutdown / malfunction" definition and best operational practices with the District and if applicable local program. Their concern is for purposes of reporting "excess emissions", etc. He may send letter to append recent TV application.

STATE OF FLORIDA, DEP, BUREAU OF AIR REGULATION, TITLE V SECTION

TELEPHONE CONVERSATION RECORD

TO: Subject files

FROM: SCOTT SHEPLAK

DATE: 09/11/96 TIME: ~2pm.

WITH: Mr. Don Beckham

REPRESENTING: U.S. Generating

TELEPHONE NO.: ?

SUBJECT: Cedar Bay (ID# 0310337)

Indiantown (ID# 0850102)

"Start up / Shutdown / Malfunction"

SUMMARY: Mr. Beckham called asking about the subject matter. He wanted to know if a Title V Source can define "start up / shutdown" and request that the definition be included in TV permit. & He may have defined in recent TV application and included best operational practices & he wanted to know if he can do this in TV permit. I advised that the agency is not required to define "start up/shutdown/malfunction" or include best operational practices in TV permit. It may be possible for the agency to put in TV permit as "Applicant request." According to him, they have coordinated development of "start up/shutdown/malfunction" definition and best operational practices with the District and if applicable local program. Their concern is for purposes of reporting "excess emissions", etc. He may send letter to append recent TV application.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION	)	
CEDAR BAY COGENERATION PROJECT	)	OGC NO. 88-1089
CEDAR BAY GENERATING COMPANY, L.P.	)	CERTIFICATION NO. PA 88-24C
U.S. GENERATING COMPANY	)	
	)	

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. This certification has been previously modified by Department orders on May 11, 1993, and October 9, 1995. The facility is owned by Cedar Bay Generating Company, L.P. (CBGC), of which Cedar Bay Cogeneration, Inc., is a general partner.

On October 4, 1995, CBGC filed a request to modify the conditions of certification pursuant to Section 403.516(1)(b), Florida Statutes (F.S.). That request was subsequently revised on November 21 and 22, 1995. CBGC requested minor changes to the conditions related to the absorber dryer system and the ash handling and removal system. The changes to the conditions will incorporate changes being made in the corresponding Prevention of Significant Deterioration air construction permit (No. PSD-FL-137C), which the Department of Environmental Protection proposed to revise on January 11, 1996.

Copies of CBGC's request were distributed to all parties to the certification proceeding and made available for public review. On May 10, 1996, the Department published a Notice of Intent to Issue the Proposed Modification in the Florida Administrative Weekly. As of May 22, 1996 , all of the parties to the original proceeding had received copies of the Intent to Issue. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No timely objection to the proposed modifications that are set forth below was received by the Department.

Accordingly, in the absence of any timely objection, IT IS ORDERED:

The proposed modifications to the Conditions of Certification relating to material handling emissions sources as described in the modification request are hereby APPROVED, subject to the modified conditions of certification below. Pursuant to Section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Cedar Bay Cogeneration Project as follows:

II. B. 1. The material handling and treatment operations, including coal and absorber material ~~limestone~~ unloading buildings, coal and ~~limestone~~ absorber material reclaim hoppers, coal crusher house, the Absorber Dryer System (ADS) including two absorber crusher/dryer trains ~~limestone dryers~~, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may

be operated continuously, i.e. 8760 hrs/yr, except that the ~~limestone crushers/dryers may be operated for a maximum of 11 hours per day (maximum of 2920 hrs/yr) at maximum capacity~~ two ADS trains may be operated in any combination for maximum of 22 train-hours per day (maximum of 8030 train-hrs/yr) at maximum capacity.

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
ADS Trains (2) ~~Limestone Pulverizers (2)/Conveyors~~
~~Limestone Storage Bins (2)~~
ADS Storage Bins (2)
Bed Ash Hopper
Bed Ash Sepearators
Bed Ash Silo Vent
Fly Ash Silo Vent
Fly Ash Sepearators (2)
Bed Ash Receiver
Fly Ash Receiver
Pellet Vibratory System
Pellet Recycle Tank
Cured Pellet Screening Conveyor System
Pellet Recycle Conveyor
Pelletizing Rail Loadout
Dry Ash Rail Car 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 62-296.711, 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 or Method 17 pursuant to Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial performance test 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.

The dry ash loadout system and the pelletizer system shall not be operated simultaneously.

II. B. 7. The maximum emissions from each of the ADS trains ~~Limestone Pulverizers/Conveyors (including limestone dryer)~~ shall not exceed the following:

Estimated Limitations

Pollutant ~~pulverizer/conveyors~~	lbs/hr	TPY	TPY for 2 ADS trains
PM/PM10	1.08 ~~1.26*~~	2.18 ~~1.68~~	4.35*~~3.36~~
SO_2	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO_x	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO_2, CO, NO_x, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

* This value is derived from the design volumetric flow rate limit of 42,100 dscfm, the emission limit in condition II.B.4.a of 0.003 gr./dscf, and the hours of operation limit in condition II.B.1 of 8030 hours per year. (42,100 dscf/min) * (60 min/hr) * (0.003 gr/dscf) * (1 lb/7000 gr.) * (8030 hours/yr) * (1 ton/2000 lb.) = 4.35 tons/yr.

* ~~This reflects the emission limitation for the limestone pulverizers/conveyors in Condition II.B.4.a and limits the emission for the Limestone Pulverizer/Conveyor and the dryer.~~

Visible emissions from the ADS trains ~~limestone pulverizers/conveyors~~ shall not exceed 5% opacity.

II. B. 12. The maximum material feed rate to each ADS train shall not exceed 42.6 tons per hour and the volumetric flow rate shall not exceed 42,100 dry standard cubic feet per minute per ADS train.

II. B. 13. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited.

then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

Any party to this Order has the right to seek judicial review of the Order pursuant to section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice 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 24th day of July, 1996, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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

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

Clerk — Date 7/25/96

CERTIFICATE OF SERVICE

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

Doug Roberts, Esq.
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314

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

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

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

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

Rob Vandiver, General Counsel
Bob Elias, Esquire
Bureau of Electric & Gas
Florida Public Service Comm.
2540 Shumard Oak Blvd..
Tallahassee, FL 32399-0850

David Russ, Esq.
Department of Community Affairs
2740 Centerview Dr.
Tallahassee, FL 32399-2100

James A. Heard, Esq.
1845 Lake Street No. 3
San Francisco, CA 94121

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

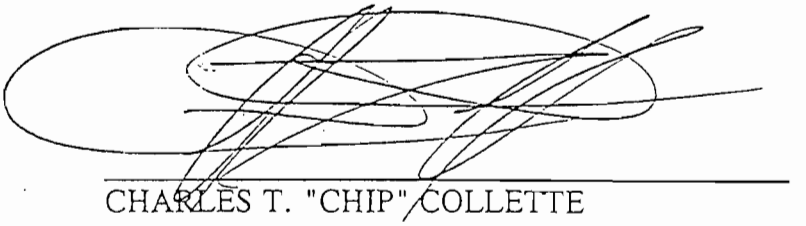
Lisa B. Cooper, Esq.
Margol & Pennington
76 Laura St.
Jacksonville, FL 32202

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

Charles W. Bostwick
P.O. Box 12
Jacksonville, FL 32201-0012

this 25th day of July, 1996.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



CHARLES T. "CHIP" COLLETTE
Assistant General Counsel

3900 Commonwealth Blvd.
MS 35
Tallahassee, FL 32399-3000
904/488-9730

B. File

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

June 3, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Timothy J. Cotner
Plant Director
Cedar Bay Generating Company, L.P.
Post Office Box 26324
9460 Eastport Road
Jacksonville, Florida 32226-6324

Dear Mr. Cotner:

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

The Department received your request of October 4, 1995, and November 22, 1995 to make minor amendments to the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizer/conveyor for the above referenced PSD permit. The permit's specific conditions are amended as shown:

II. B. 1. The material handling and treatment operations, including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, ~~limestone dryers~~ the Absorber Dryer System (ADS) including two absorber crusher/dryer trains, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, 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~~ two ADS trains may be operated in any combination for maximum of 22 train-hours per day (maximum of 8030 train-hrs/yr) at maximum capacity.

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

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

Coal Crusher Building
Coal Silo Conveyor
~~Limestone Pulverizers (2)/Conveyors~~ ADS Trains (2)
ADS Storage Bins (2)
Bed Ash Hopper
Bed Ash Seperator
Bed Ash Silo Vent
Fly Ash Silo Vent
Fly Ash Seperators (2)
Bed Ash Receiver
Fly Ash Receiver
Pellet Vibratory System
Pellet Recycle Tank
Cured Pellet Screening Conveyor System
Pellet Recycle Conveyor
Pelletizing Rail Loadout
Dry Ash Rail Car 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 62-296.711, 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 **or Method 17** pursuant to Rule 62-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version). Initial performance test 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.

The dry ash loadout system and the pelletizer system shall not be operated simultaneously.

II. B. 7. The maximum emissions from each of the ~~Limestone Pulverizers/Conveyors (including limestone dryer)~~ ADS trains shall not exceed the following:

Estimated Limitations

Pollutant	lbs/hr	TPY	TPY for 2 ~~pulverizer/conveyors~~ ADS trains
PM/PM_{10}	~~1.26~~* 1.08	~~1.68~~ 2.18	~~3.36~~ 4.35*
SO_2	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO_x	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO_2, CO, NO_x, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

~~* This reflects the emission limitation for the limestone pulverizers/conveyors in condition II.B.4.a and limits the emission for the limestone Pulverizer/Conveyor and the dryer.~~

* This value is derived from the design volumetric flow rate limit of 42,100 dscfm, the emission limit in condition B.4.a of 0.003 gr./dscf, and the hours of operation limit in condition B.1 of 8030 hours per year.

(42,100 dscf/min) * (60 min/hr) * (0.003 gr/dscf) * (1 lb/7000 gr.) * (8030 hours/yr) * (1 ton/2000 lb.) = 4.35 tons/yr.

Visible emissions from the ~~limestone pulverizers/conveyors~~ ADS trains shall not exceed 5% opacity.

II. B. 12. The maximum material feed rate to each ADS train shall not exceed 42.6 tons per hour and the volumetric flow rate shall not exceed 42,100 dry standard cubic feet per minute per ADS train.

II. B. 13. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

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

Sincerely,

Howard L. Rhodes

Howard L. Rhodes, Director
Division of Air Resources Management

HLR/sa/t

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that all copies of this PERMIT AMENDMENT were mailed before the close of business on 6-4-96 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Chapter §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kim Tober 6-4-96
Clerk Date

Final Determination

The permit amendment affecting the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverizers/conveyors for Cedar Bay Cogeneration, located in Duval County, Florida, was distributed on January 17, 1996. The Notice of Intent to Issue was published in the Florida Times Union on February 19, 1996. Copies of the amendment were available for public inspection at the Department Offices in Jacksonville and Tallahassee.

No comments were submitted by the National Park Service and the U.S. Environmental Protection Agency. Comments were submitted by the applicant relating to minor language changes and inclusion of EPA Method 17 for particulate testing in the draft permit amendment. The Department agrees with the applicant, and appropriate changes have been included.

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

Jonathan: File

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

April 9, 1996

Mr. Timothy J. Cotner
Plant Director
Cedar Bay Generating Company
Post Office Box 26324
Jacksonville, Florida 32226-6324

Dear Mr. Cotner:

This letter is in response to your April 2 letter regarding insignificant emissions units. As a result of EPA's "White Paper" and the conditions for final delegation of Title V permitting to the State, our procedures for exempting emissions units at a Title V source have been drastically revised as follows:

Those things that are listed on an attachment to Guidance Memorandum DARM-PER/V-15, enclosed, need not be included in the permit. All other activities that actually emit air pollutants need to be listed on the application form as exemptable emissions units, unregulated emissions units or regulated emissions units pursuant to Rule 62-213.420, F.A.C., and the new application forms, enclosed.

Specially refer to Rules 62-213.420(1)(b), (3) and (6), F.A.C., and the application form instructions dated March 21, 1996.

Please contact me at the letterhead address or (904) 488-1344 if you have any questions.

Sincerely,

R. Bruce Mitchell
Environmental Administrator
Title V Section

RBM/sk

Enclosure

Cedar Bay Generating Company
Limited Partnership

April 2, 1996

Mr. Bruce Mitchell
Administrator, Title V Program
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: **Insignificant Source Listing**
Cedar Bay Generating Facility

Dear Mr. Mitchell

Consistent with your discussion with Don Beckham on exempt sources, a list of sources that we believe are exempt from Title V permitting has been compiled for the Cedar Bay Generating Facility. We are submitting this listing for your advance review to obtain the DEP's concurrence on the exempt status. We have provided a list of each source identified as exempt, the basis for that determination and supplemental information necessary to support that presumption.

We would appreciate your review and concurrence with our position on these sources. In the Title V application, we will include all of Cedar Bay's emission units, including those defined as insignificant; your letter response to this request will be attached as documentation.

We look forward to your approval or comments on this request. Do not hesitate to contact me at (904) 751-4000, extension 17 if you require additional information, or to schedule a visit to the Cedar Bay Generating Plant to review any of the identified sources.

Sincerely,

Timothy J. Cotner
Plant Director

TJC/aen

P.O. Box 26324 • 9640 Eastport Road • Jacksonville, FL 32226-6324 • 904-751-4000 • Fax 904-751-7320
An affiliate of U.S. Generating Company

Enclosures:
1. List of Significant/Exempt Activities
2. Letter from Howard L. Rhodes, FDEP to Angela Morrison, Hopping, Boyd, Green and Sams, dated May 20, 1994
3. Tanks 2 Calculations
4. Calculations for Specific Activities

cc: D. Beckham
K. Field, ENSR
T.M. Murray, Banque Paribas

List of Insignificant/Exempt Activities		
No.	Source/Activity	Reason for Exemption/Insignificance
1	Ash Handling Systems Pressure/Vacuum Relief Valves.	Safety use only. Normal relief is provided by baghouse blower and vent. (FAC 62-210.300(3)(a)(21)
2	Coal additives for improved flow.	Exempt. No regulated pollutants.
3	Magnetic Separator Chute.	Negligible PM Emissions expected; only that from what might cling to metal as it is removed.
4	Cation Exchanger; Anion Exchanger.	Exempt. No regulated pollutants.
5	Amine Solution Mixer Tank.	Closed container. Item 27 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. (Enclosure 2)
6	Air Compressors, compressed air system.	Exempt. No regulated pollutants. Item 39 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
7	Sandblaster with Filter.	Item 2 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
8	Office Copying/Supplies.	Item 14 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
9	Fuel Oil Truck Unloading Station. Fuel Oil transfer pump 1 FOA-P-1 rated 1,175 gpm.	PSD Permit Condition II.B.3 states, "VOC emissions from the maximum No.2 fuel oil utilization rate...are not expected to be significant." Less than 2,600,800 gallons per year of No. 2 Fuel Oil, per PSD FL 137A II.A.1.e, II.B.3, II.B.8
10	Fuel Oil Storage Tank - (1 FOA-TNK-1).	Fugitives from tank and transfer system. See Enclosure 3, TANKS 2 report, ID 1FOA-TNK-1.
11	Building Exhaust Fans.	Exempt. DARM-PER/V-15, dated Feb. 12, 1996.
12	Acid Storage Tank.	Not an H2SO4 mist source. Tank vapor is released through displacement during tank loading.
13	Phosphate Solution Mixer Tank.	Closed container. Item 27 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
14	Chemical Waste Mixer Tank.	Closed container. Item 27 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
15	Solvent Storage.	Citrus based solvents in closed containers, such as drums or totes, that will not emit any VOC or HAP. Painting solvents are included in Maintenance Painting, Item 66. DARM-PER/V-15, dated Feb. 12, 1996
16	Plant Ground Maintenance.	Item 32 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
17	Maintenance (Cleaning, Welding, Non-Asbestos Removal).	Item 10 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision, Hopping, Boyd, Green and Sams, dated May 20, 1994.
18	Sodium Hypochlorite Storage Tank - (HRE-TNK-3). All other closed tanks for water/waste water treatment. Includes H2SO4, NH3, Caustic, Phosphate, Amine, Oxygen Scavenger, Magnesium Chloride.	Closed container. Item 27 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision, Hopping, Boyd, Green and Sams, dated May 20, 1994.
19	Fire Pump Diesel Engine.	Rule 62-210.300(3)(a)(20).
20	Chemical Waste Sumps.	For spills only. For neutralization, refer to item 28 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. For immediate transfer to waste containers, refer to item 38 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of

List of Insignificant/Exempt Activities		
No.	Source/Activity	Reason for Exemption/Insignificance
		Hopping, Boyd, Green and Sams, 5/20/94.
21	CEM Calibration Gases.	Item 15 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
22	Street Sweeping; outdoor vacuum truck cleanup.	Item 8 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. Vacuum truck emissions are filtered.
23	Fuel Oil Heavy Equipment Diesel Tanks - (2) Tanks.	Fugitives from tank and transfer system. See Enclosure 3, TANKS 2 report, ID Diesel 2. Tank volumes less than 550 gal. Item 40 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
24	Sewer/Kitchen Vents.	Items 22 and 23 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
25	Diesel Fuel Pump.	Item 16 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
26	Diesel Fuel Pump Oil Tank (1 WSE-TNK-2), 320 Gallons.	Item 16 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
27	H2 Vent.	Exempt. Not a regulated pollutant.
28	DeNox Facility (NH3 addition).	Chemicals stored in closed container. Ammonia slip requirements included with boiler emissions calculated for each of the three boilers.
29	Transformer Maintenance.	Item 19 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
30	Steam Vents.	Exempt. Not a regulated pollutant.
31	Trace Heating.	Item 24 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
32	N2 cap during boiler shutdown.	Exempt. Item 20 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
33	Waste fiber loading hopper and conveyor system.	Wet material; no PM emissions expected.
34	Building Vents.	Item 17 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
35	Lab Hood, other laboratory activities.	Exempt by Rule 62-210.300(o).
36	Generator Venting (H2, CO2).	Exempt. Item 21 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
37	Soot Blowing.	Steam vents only. Soot is blown through flue, and is therefore regulated by boiler requirements.
38	Feed Water Heater Vents.	Exempt, steam only.
39	Turbine Lube Oil Vent with Oil Mist Eliminator (1TGO-SEP-1).	Item 31 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
40	RO - High Temp AntiFoam Addition to Brine Concentrator (BC).	Exempt; no regulated pollutants.
41	RO - Degasifier Packed Column (Sulfur odor, H2S emissions).	Item 18 from Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.; less than 0.2 tpy. Calc: (0.2 ppm H2S)(400 gpm)(8.3 lb/gal)(60 min/hr)(8760 hr/yr) = 0.1745 tpy.

42	Coal Pile Run-off Pond.	Item 5 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
43	Tower Loop - Soda Ash Storage Silo.	Particulate less than 0.001 tpy. See attached calculations.
44	Tower Loop - Lime Storage Silo.	Particulate less than 0.001 tpy. See attached calculations.
45	Yard Area Runoff Pond (Unlined.)	Item 28 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
46	Tower Loop - Backwashable Filter.	Too wet for PM. Organics have been previously treated.
47	Tower Loop - Accelator.	VOCs, Chlorine are treated/removed prior to this activity.
48	Service Area Runoff Pond (Lined.)	Item 28 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94.
49	Tower Loop - Dual media filter (DMF).	Closed system.

50	RO - AntiScalant Tank Addition to BC.	Exempt. No regulated pollutants.
51	RO - High Temp AnitFoam Tank Additive to Crystallizer.	Exempt. No regulated pollutants.
52	SK - DensaDeg Mixer/Settler.	Organics, Chlorine treated or removed prior to this activity.
53	Coal transfer to coal receiving pile via lowering well (partial enclosure, lowering well is a "chute" with openings for distribution of coal).	PM emissions less than 0.25 tpy. See attached calculations for "CF4".
54	Wind erosion from coal receiving pile.	Item 6 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. See attached calculations for "CF5". PM emissions less than 0.001 tpy.
55	Wind erosion from 27-day coal storage pile.	Item 6 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. See attached calculations for "CF6". PM emissions less than 0.005 tpy.
56	Ash handling front end loader traffic.	PM emissions less than 0.05 tpy. See attached calculations for "AF7".
57	Wind erosion related to ash handling operations.	PM emissions less than 0.0001 tpy. See attached calculations for "AF-5b".
58	Bed ash transfer from boilers to wheelbarrows (bed ash rejects).	PM emissions less than 0.03 tpy. See attached calculations for "AF1".
59	Pellet screen cleanout.	PM emissions less than 0.03 tpy. See attached calculations for "AF2".
60	Ash pelletizing area cleanup (drops and transfer to temporary pile).	PM emissions less than 0.05 tpy. See attached calculations for "AF3".
61	Front end loader transfers to temporary pile.	PM emissions less than 0.2 tpy. See attached calculations for "AF5a".
62	Temporary rail car loading of pelletizer recycle material and other particulate debris.	PM emissions less than 0.1 tpy. See attached calculations for "AF6".
63	Recycle surge hopper baghouse exhausts within enclosure. ASF-FLT-3	PM emissions less than 0.01 tpy. See attached calculations for "AF11". This baghouse has been subject of permit modifications due to the enclosure and is being removed from existing permits. Emissions are considered "fugitive" because the exhaust is within an enclosure without a stack/vent direct to atmosphere.
64	Limestone pile wind erosion.	Item 6 in Crist Power Plant Site Visit, letter from DEP to Ms. Morrision of Hopping, Boyd, Green and Sams, 5/20/94. See attached calculations for "LF1". PM emissions less than 0.01 tpy.
65	Feeder vent filters on pulverizer system (6 vent filters) (1SGH-FLT-1A1; -1A2; -	PM emissions less than 0.015 tpy per filter. See attached calculations for "L1-L6".

	1B1; -1B2; -1C1; and -1C2).	
66	Maintenance Painting	DARM-PER/V-15, dated Feb. 12, 1996 and EPA White Paper dated July 10, 1995 lists as trivial activity: "Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification.[1] " Maintenance activities result in emissions that are below thresholds for exemption in Rule 62-213.420(6)(b).

[1] Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements.

TANKS PROGRAM 2.0 07/06/95
EMISSIONS REPORT - SUMMARY FORMAT PAGE 1
TANK IDENTIFICATION AND PHYSICAL CHARACTERISTICS

Identification
- Identification No.: 1FOA-TNK-1
- City: Cedar Bay
- State: FL
- Company: Cedar Bay Cogeneration, Inc.
- Type of Tank: Vertical Fixed Roof

Tank Dimensions
- Shell Height (ft): 19
- Diameter (ft): 24
- Liquid Height (ft): 18
- Avg. Liquid Height (ft): 10
- Volume (gallons): 60920
- Turnovers: 43
- Net Throughput (gal/yr): 2601284

Paint Characteristics
- Shell Color/Shade: White/White
- Shell Condition: Good
- Roof Color/Shade: White/White
- Roof Condition: Good

Roof Characteristics
- Type: Cone
- Height (ft): 3.00
- Radius (ft) (Dome Roof): 0.00
- Slope (ft/ft) (Cone Roof): 0.2500

Breather Vent Settings
- Vacuum Setting (psig): -0.15
- Pressure Setting (psig): 0.15

Meteorological Data Used in Emission Calculations: Jacksonville, Florida

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.94	64.36	75.52	68.02	0.0089	0.0075	0.0107	130.000			130.00	Option 4: A=12.1010, B=8907.0

Annual Emissions Report

Liquid Contents	Losses (lbs.): Standing	Withdrawal	Total
Distillate fuel oil no. 2	7.37	62.58	69.96
Total:	7.37	62.58	69.96

TANKS PROGRAM 2.0
EMISSIONS REPORT - SUMMARY FORMAT
TANK IDENTIFICATION AND PHYSICAL CHARACTERISTICS

Identification

Identification No.:	Diesel 2
City:	Jacksonville
State:	FL
Company:	Cedar Bay Cogeneration, Inc.
Type of Tank:	Horizontal Fixed Roof

Tank Dimensions

Shell Length (ft):	7
Diameter (ft):	4
Volume(gallons):	400
Is tank underground? (Y/N):	N
Turnovers:	45
Net Throughput (gal/yr):	18000

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition:	Good

Breather Vent Settings

Vacuum Setting (psig):	-0.15
Pressure Setting (psig):	0.15

Meteorological Data Used in Emission Calculations: Jacksonville, Florida

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	75.39	66.08	84.70	70.24	0.0106	0.0079	0.0141	130.000			130.00	Option 4: A=12.1010, B=8907.0

Annual Emissions Report

Liquid Contents	Losses (lbs.): Standing	Withdrawal	Total
Distillate fuel oil no. 2	0.24	0.49	0.74
Total:	0.24	0.49	0.74

43 - SODA ASH STORAGE SILO
44 - LIME STORAGE SILO

CEDAR BAY -ZERO DISCHARGE

3. Computation of Fugitive Emissions Resulting from Unloading Lime and Soda Ash

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Data: (From Cedar Bay operations)

Mass of Lime Unloaded per Batch = 1400 cubic feet
Frequency of Batches = 1.5/week
Mass of Soda Ash Unloaded per Batch = 1000 cubic feet
Frequency of Batches = 1/week
Time required to unload one batch = 0.75 hr
Bulk Density of Lime = 37 lb/cu ft
Bulk Density of Soda Ash = 76 lb/cu ft
Air flow rate = 750 cfm

$gr := \frac{lb}{7000}$ $tpy := \frac{ton}{yr}$ $cfm := \frac{ft^3}{min}$ $scf := ft^3$

Lime Loading Emissions:

$$PM := 0.003 \cdot \frac{gr}{scf} \cdot 750 \cdot cfm \cdot \frac{lb}{7000 \cdot gr} \cdot 60 \cdot \frac{min}{hr} \cdot 0.75 \cdot 1.5 \cdot \frac{hr}{week} \cdot 52 \cdot \frac{week}{yr} \cdot \frac{ton}{2000 \cdot lb}$$

$PM = 0.00056 \cdot tpy$

Soda Ash, Emission Point Z2, Controlled Emission Rate

$$PM := 0.003 \cdot \frac{gr}{scf} \cdot 750 \cdot cfm \cdot \frac{lb}{7000 \cdot gr} \cdot 60 \cdot \frac{min}{hr} \cdot 0.75 \cdot \frac{hr}{week} \cdot 52 \cdot \frac{week}{yr} \cdot \frac{ton}{2000 \cdot lb}$$

$PM = 0.00038 \cdot tpy$

#53 - COAL TRANSFER TO COAL RECEIVING PILE VIA LOWERING WELL

U.S. GENERATING - CEDAR BAY - Coal Title V

CF4: TRANSFER TO RECEIVING PILE VIA LOWERING WELL, partial enclosure
Ref: AP-42, 4th ed., 11.2.3

k30 := 0.74 Particles < 30 μm k10 := 0.35 Particles < 10 μm
U := 7.8 Mean wind speed, 7.8 mph
M := 6 Moisture, %, conservative value
Eff := 50·% Control Efficiency due to partial enclosure offered by lowering well

$QA = 1030570 \cdot tpy$ $QH = 2000 \cdot tph$ $QD = 4800 \cdot \frac{ton}{day}$

$EF30 := k30 \cdot (0.0032) \cdot \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \cdot \frac{lb}{ton}$ $EF30 = 0.00091 \cdot \frac{lb}{ton}$ TSP emission factor

$EF10 := EF30 \cdot \frac{k10}{k30}$ $EF10 = 0.00043 \cdot \frac{lb}{ton}$ PM10 emission factor

TSP	PM10
$QA \cdot EF30 \cdot (1 - Eff) = 0.23361 \cdot tpy$	$QA \cdot EF10 \cdot (1 - Eff) = 0.11049 \cdot tpy$
$QH \cdot EF30 \cdot (1 - Eff) = 0.90672 \cdot \frac{lb}{hr}$	$QH \cdot EF10 \cdot (1 - Eff) = 0.42885 \cdot \frac{lb}{hr}$
$QD \cdot EF30 \cdot (1 - Eff) = 2.17613 \cdot \frac{lb}{day}$	$QD \cdot EF10 \cdot (1 - Eff) = 1.02925 \cdot \frac{lb}{day}$

#54: WIND EROSION FROM COAL RECEIVING PILE

U.S. GENERATING - CEDAR BAY - Coal Title V

CF5: WIND EROSION FROM RECEIVING PILE

$Surface := 2287 \cdot m^2$ Assumes same surface area as for Cedar Bay Cogeneration Project Air Quality Analysis, February 1993

From AP-42, Table 11.2.7-3, Dated 9/90:

Us:Ur Ratio	% of Total Area	Area (m^2)
0.2	40	$40 \cdot \% \cdot Surface = 914.8 \cdot m^2$
0.6	48	$48 \cdot \% \cdot Surface = 1097.76 \cdot m^2$
0.9	12	$12 \cdot \% \cdot Surface = 274.44 \cdot m^2$

$Surface := 12 \cdot \% \cdot Surface$ $Surface = 274.44 \cdot m^2$

Determination of Pi

$Pi := 3.835 \cdot \frac{gm}{m^2}$ (for Coal Pile, Ref. Cedar Bay Cogeneration Project Air Quality Analysis, February 1993)

TSP Emissions

$TSP := Pi \cdot (Surface)$ $TSP = 1052.4774 \cdot gm$

Assuming pile disturbed daily with equal erosion potential each day:

$$E := 1.0 \cdot \frac{1}{yr} \cdot \sum_{i=1}^{365} TSP \qquad E = 0.09662 \cdot \frac{lb}{hr}$$

$$\frac{18 \cdot hr}{yr} \cdot E = 0.0008696 \cdot tpy \qquad \frac{3 \cdot hr}{day} \cdot \frac{day}{24 \cdot hr} \cdot E = 0.0121 \cdot \frac{lb}{hr}$$

#55- WIND EROSION FROM 27-DAY COAL STORAGE PILE

U.S. GENERATING - CEDAR BAY - Coal Title V

CF6: WIND EROSION FROM 27-DAY STORAGE PILE

Surface := 10086·m² Assumes same surface area as Cedar Bay Cogeneration Project Air Quality Analysis, February 1993

From AP-42, Table 11.2.7-3, Dated 9/90:

Us:Ur Ratio	% of Total Area	Area (m^2)
0.2	36	$36 \cdot \%\cdot Surface = 3630.96 \cdot m^2$
0.6	50	$50 \cdot \%\cdot Surface = 5043 \cdot m^2$
0.9	14	$14 \cdot \%\cdot Surface = 1412.04 \cdot m^2$

$Surface := 14 \cdot \%\cdot Surface$ $Surface = 1412.04 \cdot m^2$

Determination of Pi

$Pi := 3.835 \cdot \frac{gm}{m^2}$ (for Coal Pile, Ref. Cedar Bay Cogeneration Project Air Quality Analysis, February 1993)

TSP Emissions

$TSP := Pi \cdot (Surface)$ $TSP = 5415.1734 \cdot gm$

Assuming pile disturbed daily with equal erosion potential each day:

$$E := 1.0 \cdot \frac{1}{yr} \cdot \sum_{i=1}^{365} TSP \qquad E = 0.49711 \cdot \frac{lb}{hr}$$

$$\frac{18 \cdot hr}{yr} \cdot E = 0.004474 \cdot tpy \qquad \frac{3 \cdot hr}{day} \cdot \frac{day}{24 \cdot hr} \cdot E = 0.0621 \cdot \frac{lb}{hr}$$

#56 - ASH HANDLING FRONT END LOADER TRAFFIC

U.S. GENERATING - CEDAR BAY - Scenario 1 Ash Fugitives

AF7 Front End loader Traffic

$Bucket := 4.5 \cdot yd^3$ $Bucket := Bucket \cdot 72 \cdot \frac{lb}{ft^3}$ $Bucket = 4.374 \cdot ton$

$VMT1 := 20 \cdot ft \cdot 4480 \cdot tpy \cdot \frac{2}{Bucket}$ Pile to Feed Hopper, round trip

$VMT1 = 7.7593 \cdot \frac{mi}{yr}$

$VMT2 := 200 \cdot ft \cdot 5200 \cdot tpy \cdot \frac{2}{Bucket}$ Pile to Temporary Rail Loading, round trip

$VMT2 = 90.0639 \cdot \frac{mi}{yr}$

$VMT3 := 50 \cdot ft \cdot 4480 \cdot tpy \cdot \frac{2}{Bucket}$ Discharge Chute to Pile, round trip

$VMT3 = 19.3984 \cdot \frac{mi}{yr}$

$k := 1$ particle size multiplier, TSP, Stokes diameter. (Alternative 0.80, this is more conservative). Use 0.36 for PM10 (AP-42 4th ed. and 5th ed.)

$s := 5$ silt content, conversative estimate, since we have combination of fly ash, bed ash, pellet recycle, broken pellets, and native soil..

$S := 1.5$ mean vehicle speed, mph for 20 ft; 5 mph for 200 ft; 3 mph for 50 ft.

$W := 30$ mean vehicle weight, ton

$w := 4$ mean number of wheels

$p := 115$ mean number days > 0.01 in. precipitation

$Eff := 70 \cdot \% \cdot 50 \cdot \%$ Control by wetting (70%) applied about 50% of time

The following equations are given a "B" rating, since AP-42 assigns a "B" rating for p > 0.

For TSP where E1, E2, E3 and E4 are emission rate per vehicle mile traveled,

$E1 := 5.9 \cdot k \cdot \frac{s}{12} \cdot \frac{S}{30} \cdot \frac{W}{3}^{0.7} \cdot \frac{w}{4}^{0.5} \cdot \frac{365 - p}{365} \cdot \frac{lb}{mi}$ $E1 = 0.4219 \cdot \frac{lb}{mi}$ for 1.5 mph

$E2 := E1 \cdot \frac{5}{1.5}$ $E2 = 1.4065 \cdot \frac{lb}{mi}$ Adjust for 5 mph vs 1.5 mph

$E3 := E1 \cdot \frac{3}{1.5}$ $E3 = 0.8439 \cdot \frac{lb}{mi}$ Adjust for 3 mph vs 1.5 mph

$TSP := (1 - Eff) \cdot (VMT1 \cdot E1 + VMT2 \cdot E2 + VMT3 \cdot E3)$

$TSP = 0.0476 \cdot tpy$ $5 \cdot mph \cdot E2 = 7.0325 \cdot \frac{lb}{hr}$ Assumes most miles traveled in one hour is 5

For PM10, k=0.36, thus

$PM10 := TSP \cdot \frac{0.36}{k}$ $PM10 = 0.0171 \cdot tpy$ $5 \cdot mph \cdot E2 \cdot \frac{0.36}{k} = 2.5317 \cdot \frac{lb}{hr}$

#57 - WIND EROSION RELATED TO ASH HANDLING OPERATIONS

U.S. GENERATING - CEDAR BAY - Scenario 1 Ash Fugitives

Wind Erosion - Ash Handling Operations

Bed Ash and Yard Cleanup Storage Pile (AF-5b)

Surface Area

Assume: Volume Total contribution is one week of bed ash plus one week of yard cleanup

$Mass := 100 \cdot ton$ $Vtotal := \frac{Mass}{70 \cdot \frac{lb}{ft^3}}$ $Vtotal = 2857.1429 \cdot ft^3$

Base diameter to height ratio (Conical shape) $Hratio := 3$

$r := \left[\frac{9}{(2 \cdot \pi)} \cdot Vtotal\right]^{\frac{1}{3}}$ $r = 15.9955 \cdot ft$ $Dia := 2 \cdot r$ $Height := \frac{Dia}{Hratio}$ $h := \frac{Dia}{Hratio}$

$Surface := \pi \cdot r \cdot \sqrt{r^2 + h^2}$ $Surface = 966.0435 \cdot ft^2$

$Surface = 89.7484 \cdot m^2$

From AP-42, Table 11.2.7-3, Dated 9/90:

Us:Ur Ratio	% of Total Area	Area (m^2)
0.2	40	$40 \cdot \% \cdot Surface = 35.8994 \cdot m^2$
0.6	48	$48 \cdot \% \cdot Surface = 43.0792 \cdot m^2$
0.9	12	$12 \cdot \% \cdot Surface = 10.7698 \cdot m^2$

$Surface := 12 \cdot \% \cdot Surface$ $Surface = 10.7698 \cdot m^2$

Determination of Pi

$Pi := 3.835 \cdot \frac{gm}{m^2}$ (for Coal Pile, Refer to 1993 Report)

Ratio of Ash to Coal Silt Contents $Aratio := \frac{5}{2.2}$ $Aratio = 2.2727$

Therefore: $Pi := Pi \cdot Aratio$ $Pi = 8.7159 \cdot \frac{gm}{m^2}$

TSP Emissions

$TSP := Pi \cdot (Surface)$ $TSP = 93.8686 \cdot gm$

Assuming pile disturbed daily with equal erosion potential each day:

$E := 1.0 \cdot \frac{1}{yr} \cdot \sum_{i=1}^{365} TSP$ $E = 0.0086 \cdot \frac{lb}{hr}$

$\frac{18 \cdot hr}{yr} \cdot E = 0.0000776 \cdot tpy$ $\frac{3 \cdot hr}{day} \cdot \frac{day}{24 \cdot hr} \cdot E = 0.0011 \cdot \frac{lb}{hr}$

EMISSIONS CALCULATIONS, potentials $EF30 = 0.0294 \cdot \frac{lb}{ton}$ $EF10 = 0.0139 \cdot \frac{lb}{ton}$

AF1 TSP

MaxHourly := EF30·0.2481·tph MaxHourly = $0.0073 \cdot \frac{lb}{hr}$

#58 MaxDaily := MaxHourly·$\frac{24 \cdot hr}{day}$ MaxDaily = $0.1751 \cdot \frac{lb}{day}$

Annual := EF30·2021·tpy Annual = 0.0297 ·tpy

PM10

MaxHourly := EF10·0.2481·tph MaxHourly = $0.0034 \cdot \frac{lb}{hr}$

MaxDaily := MaxHourly·$\frac{24 \cdot hr}{day}$ MaxDaily = $0.0828 \cdot \frac{lb}{day}$

Annual := EF10·2021·tpy Annual = 0.0141 ·tpy

AF2 TSP

MaxHourly := EF30P·224·tph MaxHourly = $2.4954 \cdot \frac{lb}{hr}$

#59 MaxDaily := EF30P·1120·$\frac{ton}{day}$ MaxDaily = $12.4768 \cdot \frac{lb}{day}$ 1120 ton is capacity of one silo.

Annual := EF30P·4480·tpy Annual = 0.025 ·tpy

PM10

MaxHourly := EF10P·224·tph MaxHourly = $1.1802 \cdot \frac{lb}{hr}$

MaxDaily := EF10P·1120·$\frac{ton}{day}$ MaxDaily = $5.9012 \cdot \frac{lb}{day}$

Annual := EF10P·4480·tpy Annual = 0.0118 ·tpy

#60

AF3

TSP

MaxHourly := EF30·5·tph

$$\text{MaxHourly} = 0.147 \cdot \frac{lb}{hr}$$

MaxDaily := EF30·100·$\frac{ton}{5 \cdot day}$

$$\text{MaxDaily} = 0.588 \cdot \frac{lb}{day}$$

Annual := EF30·3340·tpy

$$\text{Annual} = 0.0491 \cdot tpy$$

PM10

MaxHourly := EF10·5·tph

$$\text{MaxHourly} = 0.0695 \cdot \frac{lb}{hr}$$

MaxDaily := EF10·100·$\frac{ton}{5 \cdot day}$

$$\text{MaxDaily} = 0.2781 \cdot \frac{lb}{day}$$

Annual := EF10·3340·tpy

$$\text{Annual} = 0.0232 \cdot tpy$$

#61

AF5a TSP

$MaxHourly := EF30 \cdot 60 \cdot tph$ $\quad MaxHourly = 1.7639 \cdot \frac{lb}{hr}$

$MaxDaily := 1120 \cdot \frac{ton}{day} \cdot EF30P + 100 \cdot \frac{ton}{5 \cdot day} \cdot EF30$ $\quad MaxDaily = 13.0648 \cdot \frac{lb}{day}$

$Annual := EF30P \cdot 4480 \cdot tpy + EF30 \cdot 5200 \cdot tpy$ $\quad Annual = 0.1014 \cdot tpy$

PM10

$MaxHourly := EF10 \cdot 60 \cdot tph$ $\quad MaxHourly = 0.8343 \cdot \frac{lb}{hr}$

$MaxDaily := 1120 \cdot \frac{ton}{day} \cdot EF10P + 100 \cdot \frac{ton}{5 \cdot day} \cdot EF10$ $\quad MaxDaily = 6.1793 \cdot \frac{lb}{day}$

$Annual := EF10P \cdot 4480 \cdot tpy + EF10 \cdot 5200 \cdot tpy$ $\quad Annual = 0.048 \cdot tpy$

#62

AF6 TSP

MaxHourly := EF30·60·tph $\qquad$ MaxHourly = 1.7639 · $\frac{lb}{hr}$

MaxDaily := 100·$\frac{ton}{5 \cdot day}$·EF30 $\qquad$ MaxDaily = 0.588 · $\frac{lb}{day}$

Annual := EF30·(5200)·tpy $\qquad$ Annual = 0.0764 ·tpy

PM10

MaxHourly := EF10·60·tph $\qquad$ MaxHourly = 0.8343 · $\frac{lb}{hr}$

MaxDaily := 100·$\frac{ton}{5 \cdot day}$·EF10 $\qquad$ MaxDaily = 0.2781 · $\frac{lb}{day}$

Annual := EF10·(5200)·tpy $\qquad$ Annual = 0.0362 ·tpy

AF7: See above

#63

U.S. GENERATING - CEDAR BAY - Scenario 1 Ash Fugitives

AF11 (Formerly A9): RECYCLE SURGE HOPPER BAGHOUSE, ASF-FLT-3

$acf := ft^3$ $dscf := ft^3$ $acfm := \frac{acf}{min}$ $dscfm := \frac{dscf}{min}$ $gr := \frac{lb}{7000}$ $StdTemp := (460 + 68)\cdot R$

	Parameters:	References:
Flow Rate	$ACFM := 754\cdot acfm$	3-run test on 3-10-94 greater than BHA design Air Flow of 500 acfm
Moisture%	$Moist := 3.42\cdot\%$	3-run test on 3-10-94
Exit Temperature	$T := (460 + 89)\cdot R$	3-run test on 3-10-94
Emission Rate	$ER := 0.003\cdot\frac{gr}{dscf}$	Permit Condition
Allowable Hours	$OPHR := 2920\cdot\frac{hr}{yr}$	

Potential Emissions:

$SCFM := \frac{ACFM\cdot(1 - Moist)\cdot StdTemp}{T}$ $SCFM = 700.358\cdot dscfm$

$Eff := 70\cdot\%$ Control Efficiency for enclosure

$E := SCFM\cdot ER\cdot(1 - Eff)$ $E = 0.0054\cdot\frac{lb}{hr}$ $OPHR\cdot E = 0.0079\cdot tpy$

#64

Title V Cedar Bay Limestone Handling Particulates (PM)

Estimated Potential Emissions. *Limestone refers to limestone, aragonite, or other calcium source material.*

$tpy := \frac{ton}{yr}$ $tph := \frac{ton}{hr}$ $week := 5 \cdot day$ $month := \frac{yr}{12}$

$gr := \frac{lb}{7000}$ $acf := ft^3$ $dscf := ft^3$ $acfm := \frac{acf}{min}$ $dscfm := \frac{dscf}{min}$ $StdTemp := (460 + 68) \cdot R$

LF1: LIMESTONE PILE WIND EROSION

$Surface := 1793 \cdot m^2$ Assumes same pile surface area as 1993 AQA, therefore conservative

From AP-42, Table 11.2.7-3, Dated 9/90:

Us:Ur Ratio	% of Total Area	Area (m^2)
0.2	36	$36 \cdot \%\cdot Surface = 645.48 \cdot m^2$
0.6	50	$50 \cdot \%\cdot Surface = 896.5 \cdot m^2$
0.9	14	$14 \cdot \%\cdot Surface = 251.02 \cdot m^2$

$Surface := 14 \cdot \%\cdot Surface$ $Surface = 251.02 \cdot m^2$

Determination of Pi

$Pi := 3.835 \cdot \frac{gm}{m^2}$ (for Coal Pile, Ref. Cedar Bay Cogeneration Project Air Quality Analysis, February 1993

$SiltRatio := \frac{1.6}{2.2}$ $SiltRatio = 0.72727$ Ratio limestone to coal

$Pi := Pi \cdot SiltRatio$ $Pi = 2.78909 \cdot \frac{gm}{m^2}$

TSP Emissions

$TSP := Pi \cdot (Surface)$ $TSP = 700.12 \cdot gm$

Assuming pile disturbed daily with equal erosion potential each day:

$$E := 1.0 \cdot \frac{1}{yr} \cdot \sum_{i=1}^{365} TSP \qquad E = 0.06427 \cdot \frac{lb}{hr}$$

$$\frac{18 \cdot hr}{yr} \cdot E = 0.0005784 \cdot tpy \qquad \frac{3 \cdot hr}{day} \cdot \frac{day}{24 \cdot hr} \cdot E = 0.008034 \cdot \frac{lb}{hr}$$

For PM10, k=0.5, therefore

$$18 \cdot \frac{hr}{yr} \cdot E \cdot \frac{0.5}{1} = 0.000289 \cdot tpy \qquad \frac{3 \cdot hr}{day} \cdot \frac{day}{24 \cdot hr} \cdot E \cdot \frac{0.5}{1} = 0.004017 \cdot \frac{lb}{hr}$$

#65

U.S. GENERATING - CEDAR BAY - Title V Limestone (Aragonite)

L1-L6: FEEDER VENT FILTERS ON PULVERIZER SYSTEM (6 VENT FILTERS)
(1SGH-FLT-1A1; -1A2; -1B1; -1B2; -1C1; and -1C2)

Parameters:		References:
Flow Rate	ACFM := 365·acfm	BHA design Flow Rate (tested 123 acfm highest)
Moisture%	Moist := 1.17·%	Tested 1.17% lowest Interpoll March 1994
Exit Temperature	T := (460 + 85)·R	
Emission Rate	ER := 0.003·gr/dscf	Permit Condition
Allowable Hours	OPHR := 2920·hr/yr	

Estimated Potential Emissions:

$SCFM := \frac{ACFM \cdot (1 - Moist) \cdot StdTemp}{T}$ $SCFM = 349.5 \cdot dscfm$

$E := SCFM \cdot ER$ $E = 0.00899 \cdot \frac{lb}{hr}$ $OPHR \cdot E = 0.01312 \cdot tpy$ EACH VENT FILTER

THROUGHPUT ASSUMPTIONS FOR #s 58, 59, 60, 62

U.S. GENERATING - CEDAR BAY - Scenario 1 Ash Fugitives

Scenario 1 Cedar Bay Ash Handling Fugitive Particulates

Process Throughput Assumptions for Calculating Fugitive Particulate Emissions from Ash Handling System, Estimated Potentials for Scenario 1

$tpy := \frac{ton}{yr}$ $tph := \frac{ton}{hr}$ $week := 5 \cdot day$ $month := \frac{yr}{12}$ Assume front end loader can deliver 60 tph maximum.

#58 AF1 Transfer from overfill chutes from boiler beds to wheelbarrows

$wheelbarrow := 0.75 \cdot 40 \cdot gal \cdot 90 \cdot \frac{lb}{ft^3}$ $wheelbarrow = 360.9375 \cdot lb$

$\frac{11 \cdot wheelbarrow}{8 \cdot hr} = 0.2481 \cdot tph$ $0.2481 \cdot tph \cdot 8760 \cdot \frac{hr}{yr} \cdot 93 \cdot \% = 2021.2211 \cdot tpy$ Permit to operate at 93% of capacity

#59 AF2 Discharge chute from pellet screens:

Max hourly = 224 tons/hr

$Annual := \frac{1120 \cdot ton \cdot 4}{yr}$ $Annual = 4480 \cdot tpy$

#60 AF3 Pelletizing area cleanup (drops and transfer to Pile) (100 ton/week less wheelbarrow)

$Hourly := 100 \cdot \frac{ton}{week} \cdot \frac{week}{40 \cdot hr} - 0.248 \cdot tph$ $Hourly = 2.252 \cdot tph$

$Annual := 100 \cdot \frac{ton}{week} \cdot 52 \cdot \frac{week}{yr} - 2021 \cdot tpy$ $Annual = 3179 \cdot tpy$

Per Sheet1 from Cedar Bay, use 5 ton/hour for maximum hourly rate

AF4 Pellet Recharge Transfer to temporary silo loading belt, used to maintain a minimum level of pellets in silos, not applicable to this scenario.

AF5a PILE: Transfer via front end loader from wheelbarrows, pellet discharge & yard cleanup to Pile.

$Hourly := 60 \cdot tph$ Annual: AF-1 + AF-2 + AF-3 $(5200 + 4480) \cdot tpy = 9680 \cdot tpy$

Wind erosion (AF5b) follows material throughputs

AF6 Temporary Rail car loading

#62 $Hourly := 60 \cdot tph$

$Annual := 100 \cdot \frac{ton}{week} \cdot 52 \cdot \frac{week}{yr}$ $Annual = 5200 \cdot tpy$

BATCH OR CONTINUOUS DROP
EMISSION FACTORS FOR #58, 59, 60, 61, 62

Batch or Continuous Drop Emission factors

Particulate, AP-42 4th ed., Section 11.2.3

k30 := 0.74	Table 11.2.3-2 factor for TSP emissions (<30 μm)
k10 := 0.35	Table 11.2.3-2 factor for PM10 emissions (<10 μm)
U := 7.8	Avg. wind speed, mph
m_ash := 0.5	Ash Moisture content, % (conservative)

AP-42 assigns "A" rating.

EF30 = Emission Factor for TSP
EF10 = Emission Factor for PM10

$$EF30 := k30 \cdot 0.0032 \cdot \left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{m\_ash}{2}\right)^{1.4}} \right] \cdot \frac{lb}{ton} \qquad EF30 = 0.0294 \cdot \frac{lb}{ton}$$

Use for ash and pellet recycle:

$$EF10 := k10 \cdot 0.0032 \cdot \left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{m\_ash}{2}\right)^{1.4}} \right] \cdot \frac{lb}{ton} \qquad EF10 = 0.0139 \cdot \frac{lb}{ton}$$

Use for ash and pellet recycle:

For Pellets, m_pellet := 1 % moisture content

$$EF30P := k30 \cdot 0.0032 \cdot \left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{m\_pellet}{2}\right)^{1.4}} \right] \cdot \frac{lb}{ton} \qquad EF30P = 0.01114 \cdot \frac{lb}{ton}$$

$$EF10P := k10 \cdot 0.0032 \cdot \left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{m\_pellet}{2}\right)^{1.4}} \right] \cdot \frac{lb}{ton} \qquad EF10P = 0.00527 \cdot \frac{lb}{ton}$$

1/4/96 — Copy made and placed in file - Barb

Cedar Bay Generating Company
Limited Partnership

December 18, 1995

Mr. John C. Brown
FDEP
Twin Towers Office Bldg.
Tallahassee, FL 323909-2400

RE: Acid Rain Program, Phase II Permit Applications, Cedar Bay Generating Co. (CBGC) Limited Partnership

Dear Mr. Brown:

CBGC received an Acid Rain Permit Application from the FDEP on December 4, 1995. Under 40 CFR 72.6 (b), we believe that CBGC is not affected by the Acid Rain program. CBGC is an independent power production facility (IPP) having a power sales agreement (PSA) with Florida Power and Light Company entered on May 6, 1988. The Florida Public Service Commission approved the PSA pursuant to Order No. 21468 issued on 6-28-89. Order No. 23907, issued 12-20-90 is the last approved amendment to the PSA. Under the terms of the PSA, FPL Co. purchases at least 15 percent of CBGC's 250 MW net output.

We are not filing the Phase II permit application as we believe CBGC units are not affected by the Acid Rain rules. Should there be any questions or need for information, please contact me at (904) 751-4000.

Sincerely,

Kevin Grant, C.E.P., R.E.M.
Manager, Environmental, Health and Safety

cc: T. Cotner, CBGC
S. Hartman, Esq., Bethesda
D. Beckham, Bethesda
T. Murray, BP

P.O. Box 26324 • 9640 Eastport Road • Jacksonville, FL 32226-6324 • 904-751-4000 • Fax 904-751-7320
An affiliate of U.S. Generating Company

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

JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
RALPH A. DEMEO
THOMAS M. DEROSE
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
DAVID L. POWELL
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

KRISTIN M. CONROY
CONNIE C. DURRENCE
JONATHAN S. FOX
JAMES C. GOODLETT
GARY K. HUNTER, JR.
JONATHAN T. JOHNSON
ROBERT A. MANNING
ANGELA R. MORRISON
GARY V. PERKO
KAREN M. PETERSON
MICHAEL P. PETROVICH
DOUGLAS S. ROBERTS
LISA K. RUSHTON
R. SCOTT RUTH
JULIE R. STEINMEYER

OF COUNSEL
CARLOS ALVAREZ
W. ROBERT FOKES

MEMORANDUM

TO: Syed Arif

FROM: Doug Roberts DR

RE: Cedar Bay Cogeneration Project Final Order Modifying Site Certification

DATE: August 2, 1995

==========

Attached is a copy of the final signed order modifying the site certification for the Cedar Bay Cogeneration Project. You indicated that upon your receipt of this order, the Bureau would proceed to issue the separate PSD permit amendment for the Project to address these issues.

Your attention to this matter is appreciated. I would ask you to call me when the final permit amendment is issued. In the interim, should you have any questions, please do not hesitate to contact me.

Attachment

cc: Mark Carney, US Gen. Co.
Steve Herman, US Gen. Co.

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

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(l)(b), Florida Statutes (F.S.). CBC requested relief from conditions controlling emissions from the material handling system and the storage, handling, shipping disposal and reuse of solid wastes produced by the combustion of coal.

Copies of CBC's request were distributed to all parties to the certification proceeding and made available for public review. On March 24, 1995, the Department published a Notice of Intent to Issue the Proposed Modification in the Florida Administrative Weekly. Copies of the intent to issue were sent to all parties to the original proceeding. As of March 23, 1995, all of the parties to the original proceeding had received copies of the intent to issue. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No timely objection to the proposed modifications that are set forth below was received by the Department. The other matters that were addressed in the original modification request and in the Department's proposed order of modification, but that are not further addressed herein, will be addressed in separate orders at a later date.

Accordingly, in the absence of any timely objection, IT IS ORDERED :

The proposed modifications to the Conditions of Certification relating to material handling emissions sources and solid waste disposal at the Cedar Bay Cogeneration Facility are hereby APPROVED. Pursuant to section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Cedar Bay Cogeneration Project as follows:

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

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

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

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

limitation requirement of 0.003 gr/dscf (applicant-requested limitation which is more stringent than what is allowed by Rule 62 ~~17~~-296.711, F.A.C.). Since these sources are RACT standard type then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 62 ~~17~~-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992~~1~~ version).

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

~~Coal Car Unloading~~
Ash Pellet Hydrator: Scrubber
Ash Pellet Curing Silos: Scrubber
Ash Pelletizing Pan: Scrubber

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5 percent opacity and 0.01 gr/dscf (applicant-requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 62 ~~17~~-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA Methods 9 and 5, respectively, in accordance with Rule 62 ~~17~~-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992~~1~~ version).

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

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

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

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

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

Estimated Limitations

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

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

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

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

IX. SOLID WASTE STORAGE AND DISPOSAL

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

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

The remainder of Condition IX remains the same.

Any party to this Order has the right to seek judicial review of the Order pursuant to section 120.68, ~~Florida Statutes, by the~~ filing of Notice of ~~Appeal pursuant to Rule~~ 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 1st day of Aug, 1995 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell

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

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

Rebecca Barnes 8-1-95
Clerk Date

CERTIFICATE OF SERVICE

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

Doug Roberts, Esq.
Hopping Green Sams & Smith
P O Box 6526
Tallahassee FL 32314

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

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

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

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

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

David Russ, Esq.
Department of Community Affairs
2740 Centerview Dr
Tallahassee FL 32399-2100

James A. Heard, Esq.
4741 Atlantic Blvd., Ste. C
Jacksonville FL 32207

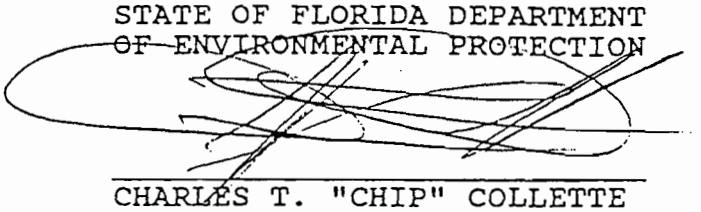
Earl M. Barker, Esq.
Slott & Barker
334 East Duval St
Jacksonville, FL 32302

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

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

this 1st day of August, 1995.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



CHARLES T. "CHIP" COLLETTE
Assistant General Counsel

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

Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

August 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Fickett:

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

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

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

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

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

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

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

~~Coal Car Unloading~~
Ash Pellet Hydrator: Scrubber
Ash Pellet Curing Silos: Scrubber
Ash Pelletizing Pan: Scrubber

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

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

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

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

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

Estimated Limitations

Pollutant	lbs/hr ~~Dryers~~	TPY	TPY for 2 Pulverizers/Conveyors
PM/PM_{10}	1.26* ~~0.24~~	1.68 ~~0.32~~	3.36 ~~0.64~~
SO_2	0.85	1.15	2.3
CO	0.60	0.81	1.62
NO_X	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO_2, CO, NO_X, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

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

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

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

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sa/t

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

Final Determination

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

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

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

Department of Environmental Protection

DRAFT

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July XX, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Fickett:

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

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

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

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

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

DRAFT

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

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

~~Coal Car Unloading~~	
Ash Pellet Hydrator:	Scrubber
Ash Pellet Curing Silos:	Scrubber
Ash Pelletizing Pan:	Scrubber

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

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

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

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

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

Estimated Limitations

Pollutant	lbs/hr	TPY	TPY for 2 Pulverizer/Conveyors ~~Dryers~~
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CO	0.60	0.81	1.62
NO_X	2.40	3.25	6.5
VOC	0.05	0.06	0.12

The emissions for SO_2, CO, NO_X, and VOC are based on AP-42 factor, Table 1, 3-1, Industrial Distillate, 10/86.

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

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

DRAFT

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

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sa/t

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

HOPPING GREEN SAMS & SMITH
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS
123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
(904) 222-7500
FAX (904) 224-8551
FAX (904) 425-3415

JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
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LISA K. RUSHTON
R. SCOTT RUTH
JULIE R. STEINMEYER

OF COUNSEL
CARLOS ALVAREZ
W. ROBERT FOKES

July 19, 1995

Mr. Syed Arif
Bureau of Air Regulation
Department of Environmental Protection
Magnolia Plaza
Tallahassee, FL 32399

Re: Cedar Bay Cogeneration Project,
Notice of PSD Permit Amendment,
Permit No. PSD-FL-137(B)

Dear Syed:

Attached for your records is the original Proof of Publication for the Notice of Intent to Issue Permit Amendment which was published in the Monday, July 17, 1995 edition of the Jacksonville Times Union.

Sincerely,

Douglas S. Roberts

DSR/gs

cc: Mark Carney, U.S. Generating Co.
Sanford Hartman, U.S. Generating Co.

CC: NED
EPA
NPS
Cleve Holladay, BAR

FLORIDA PUBLISHING COMPANY

Publisher

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared _____

Janice B. Kelly who on oath says that he is

Legal Advertising Representative of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the attached copy of advertisement, being a Legal Notice

in the matter of Notice of intent to issue permit Amendment

in the _____ Court,

was published in THE FLORIDA TIMES-UNION in the issues of

July 17, 1995

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me this 17 day of July A.D. 19 95

LINDA JANE LIKENS
MY COMMISSION # CC 228655 EXPIRES
June 4, 1998
BONDED THRU TROY FAIN INSURANCE, INC.

Notary Public,
State of Florida at Large.

My Commission Expires .....

DA 444

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT

PSD-FL-137(B)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, Maryland 20814. This facility consists of three circulating fluidized bed coal-fired boilers, associated coal ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and fugitive emissions associated with the material handling system for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.) The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner; the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F. S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28.5.207, Florida Administrative Code.

The application/request is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Department of Environmental Protection
Northeast District Suite 200B
7825 Baymeadows Way
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 14 days of the publication of this notice will be considered

Department of Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

June 30, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Fickett:

Enclosed is a proposed amendment letter and Public Notice for the Cedar Bay Cogeneration Project located in Duval County, Florida. You are required to do a public notice for this amendment. All comments during the public notice period should be addressed to Mr. A.A. Linero at the Department's Tallahassee address.

If there are additional questions on the above, please call Mr. Syed Arif at (904) 488-1344.

Sincerely,

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

CHF/sa/t

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

DEP File No. PSD-FL-137(B)
Duval County

Mr. Kent L. Fickett
Cedar Bay Generating Company, L.P.
7500 Old Georgetown Road
Bethesda, Maryland 20814
_____/

INTENT TO ISSUE PERMIT AMENDMENT

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment (copy attached) to the applicant as detailed in the application/request specified above for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Cedar Bay Generating Company, L.P., submitted an application on May 12, 1995, to the Department for a permit amendment to Cedar Bay Cogeneration Project's permit. The facility is located in Duval County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a permit amendment is required for the proposed work.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit Amendment. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit amendment.

The Department will issue the permit amendment with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/ request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to

request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE PERMIT AMENDMENT all copies were mailed by certified mail before the close of business on 7-5-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 7-5-95 Date

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT

PSD-FL-137(B)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Cedar Bay Generating Company, L.P., 7500 Old Georgetown Road, Bethesda, Maryland 20814. This facility consists of three circulating fluidized bed coal-fired boilers, associated coal, ash, and other material handling equipment, a cooling tower, and two limestone dryers. The facility is located in Jacksonville, Duval County, Florida. The amendments include the changes to the specific conditions for particulate matter and fugitive emissions associated with the material handling systems for ash pelletization, coal unloading, dry ash loading and removal, and limestone pulverization/conveyance from the site. The increase in emission due to the amendment is less than 3 tons per year of particulate matter.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/ request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Department of Environmental Protection
Northeast District
Suite 200B
7825 Baymeadows Way
Jacksonville, Florida 32256-7577

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 . All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

Additional cc 4/29/96:
Parties to Site Certification
PA-88-24

Cedar Bay Generating Company
Limited Partnership

November 21, 1995

RECEIVED
APR 30 1996
BUREAU OF
AIR REGULATION

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
Tallahassee, FL

Re: Revisions to Proposed Changes to Cedar Bay Generating Co., LP Environmental Approvals, October 4, 1995

Dear Mr. Arif:

Cedar Bay Generating Co. (CBGC) has received comments from the Jacksonville RESD regarding the October 4, 1995 proposed changes to the facility's PSD permit and site certification (i.e., environmental approvals). The RESD has requested that the proposed changes also include conditions on the dryer/crusher stack volumetric flow rate and on the material process rates of the ADS units. We are writing to inform the Department that CBGC agrees to include these conditions proposed by the RESD. We also agree to include the Department's standard language on operating rate, referencing DARM-SS/CE-04, 'Guidance on Rate of Operation During Compliance Tests', February 11, 1994, within the ADS proposed changes, provided that this condition is not retroactive.

The manufacturer's design maximum volumetric flow rate of each ADS unit is 42,100 dscfm. The design adsorber material process output of each dryer/crusher unit is 40 dry tons product per hour with a material feed rate of 42.58 tph. These specifications have been reviewed with the RESD and we have agreed to include the volumetric flow rate of 42,100 dscfm and a material feed rate limit of 42.58 tons per hour per unit in the proposed changes of October 4.

Today's proposed change to include a volumetric flow rate limit would also effect the 'Estimated Limitations' of PM. Referencing Condition II. B.7. (Estimated Limitations) of PA 88-24B, our proposed changes of October 4 noted that the increase in ADS hours would have the result of increasing potential PM emissions from 3.36 TPY to 5.06 TPY. The 5.06 TPY limit was derived by multiplying the proposed hour limit of 8030 hours by the 1.26 pound per hour limit noted in Condition II. B. 7.. The proposed volumetric flow rate limit of 42,100 dscfm would revise the ADS units' Estimated Limitations of 'PM/PM10' from 5.06 TPY to 4.35 TPY ((42,100 dscf/min.) * (60 min./ 1 hr.) * (0.0003 gr. / dscf) * (1 lb./7000 gr.) * (8030 hr.) * (1 ton / 2000 lb.)).

Again referencing Condition II. B.7, the RESD has offered suggestions in structuring the proposed changes within the 'Estimated Limitations' Table. The RESD suggests a footnote to the estimated PM/PM10 TPY value (e.g., 4.35 tons) to show that the value is derived from the

P.O. Box 26324 • 9640 Eastport Road • Jacksonville, FL 32226-6324 • 904-751-4000 • Fax 904-751-7320
An affiliate of U.S. Generating Company

design volumetric flow rate limit (42,100 dscfm), the emission limit in condition 'B. 4. a.' of 0.003 gr./dscf , and the hours of operation limit in condition 'B.1.' of 8030 hours. CBGC agrees to this footnote, if it is acceptable to the FDEP.

Design changes to improve ADS product output could be initiated in 1996. As would be required by the Department's proposed standard language, a re-test of PM emissions (Method 5 or other approved method) from ADS units A and B would be conducted should these improvements increase production rates. Additionally, since current production rates of ADS units may exceed the production rates observed during the initial PM compliance tests, we volunteer to re-test PM emissions at the end of 1996, should ADS improvements be substantially delayed.

Regarding future Title V requirements for enhanced monitoring (compliance assurance monitoring) and the RESD proposed limits on volumetric flow, we desire to have the proposed changes written to indicate that no continuous or intermittent enhanced monitoring would be required to demonstrate compliance with the proposed volumetric flow rate. We propose using compliance data from fuel use, material feed, and opacity permit conditions as a means to demonstrate compliance with Title V compliance assurance monitoring requirements.

I will contact you during the week of November 27 to discuss the revised changes. Should there be any questions regarding today's revisions to the October 4, 1995 proposed changes, please contact me at (904) 751-4000.

Sincerely

Kevin Grant /80

Kevin Grant, C.E.P.

cc: Richard Robinson, P.E., RESD
Hamilton Oven, DEP, OSC
Sandy Harman, Esq., USGen
Don Beckham, USGen
Tim Cotner, CBGC
John Garvey, CBGC

Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

April 6, 1995

Mr. Don Beckham
Cedar Bay Cogenerating Company
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

Re: Cedar Bay Cogenerating Project, Pa 88-24, Mercury Test Program

Dear Mr. Beckham:

The Florida Department of Environmental Protection and the Air Quality Division of the Jacksonville Regulatory & Environmental Services Department have reviewed the Phase I Report on mercury control testing as submitted on November 22, 1994. It is our opinion that the test program demonstrated that the mercury emissions from the Cedar Bay Cogeneration Facility are sufficiently low to preclude further investigation. Your company has demonstrated compliance with Condition of Certification II.A.2.c. No further testing or demonstrations are necessary at this time.

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.
Administrator, Siting
Coordination Office

cc: Robert S. Pace, P.E.
Bruce Mitchell

REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT
Air Quality Division

March 7, 1995

Mr. Hamilton Oven, P.E.
Administrator, Office of Siting Coordinator
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Duval County - Air Pollution
Cedar Bay Cogeneration Project
Mercury Test Program PA 88-24A

Dear Mr. Oven:

The City of Jacksonville, Regulatory and Environmental Services Department, Air Quality Division (AQD), has reviewed the mercury testing program results of the Cedar Bay facility. AQD agrees with the findings of the Northeast District that mercury emissions are sufficiently low to preclude further investigation.

Please contact Mr. Richard L. Robinson, P.E., or me at Suncom 986-3484 if there are any additional questions.

Very truly yours,

Robert S. Pace, P.E.
Division Chief

RSP/RLR/sa

c: Mr. Robert Leetch, P.E., DEP/NED
Mr. Richard L. Robinson, P.E., AQD
AQD File 1065 C

421 West Church Street - Suite 412
Jacksonville, Florida 32202-4111

Area Code 904/630-3484

Memorandum

Florida Department of
Environmental Protection

TO: Bruce Mitchell
Tom Atkeson
Steve Pace

FROM: Buck Oven BO

DATE: February 14, 1995

SUBJECT: Cedar Bay Cogeneration Project - Mercury Test Program PA 88-24

Attached for your review and comment is a Memo from the Northeast District concerning the results of the mercury testing program at the Cedar Bay Facility.

Attach:

cc: Richard Donelan

Florida Department of
Environmental Protection

Memorandum

NORTHEAST DISTRICT - JACKSONVILLE

TO: Hamilton Oven, P.E.

FROM: Morton Benjamin

THRU: Christopher Kirts, P.E.

DATE: February 8, 1995

SUBJECT: Cedar Bay Generating Company
Phase I Mercury Testing

Mercury tests were conducted on July 27, 28, 29, 1994 to meet the requirements of the conditions of Certification (II.2.c.). From this test data, a determination of whether carbon injection would be beneficial to reducing mercury emissions would be made.

The test report points out that at the boiler flue gas temperatures of 330-360 F carbon injection is not reasonable based upon EPRI studies (higher than where carbon injection was successful).

Comparison of the Cedar Bay mercury results with other coal fired electrical utility boilers indicates Cedar Bay emissions are low. (Tables 8.2A and 8.2B in report)

In addition to the Phase I testing in July, Cedar Bay conducted mercury testing at the end of January 1994. Looking at the tests as a whole, the results are consistently low in comparison to the standard.

A thorough Quality Assurance program was undertaken during the Phase I tests. An experienced consultant participated in all phases of the testing and analyses. Certified reference samples were also provided.

With all of the foregoing considerations in mind, the Northeast District is satisfied with the results of testing. We believe the mercury results are sufficiently low and no further studies are needed other than normal compliance tests.

CEDAR BAY GOGENERATING
MERCURY TEST RESULTS
lbs/Hr

	Unit 1	Unit 2	Unit 3
Initial Compliance Tests	5.8×10^{-4} 2/3	4.9×10^{-3} 1/28	1.3×10^{-3} 2/1
Phase I		6.28×10^{-3} 7/27	
		2.63×10^{-3} 7/28	
		1.69×10^{-3} 7/29	

Allowed 3×10^{-2} lbs/Hr

TABLE 8.2A - COMPARISON OF FCG AND CBCP MERCURY IN COAL STUDIES

	Samples			Mercury (µg/g)	
	Single	Duplicate	Total	Mean	Std. Dev'n.
FCG Study	30	26	56	0.100	0.032
CBCP Study	50	0	50	0.050	0.033

FCG, as part of their study, also presented a summary of mercury-related findings from EPRI and DOE. This summary was intended to build a database of information on atmospheric emissions of mercury and other chemical substances from fossil fuel-fired steam generating units. Average flue gas mercury emissions rates with their corresponding ninety-five percent confidence intervals from the EPRI and DOE tests are included in Table 8.2B, along with the CBCP results. The EPRI and DOE results are grouped by type of particulate and SO_2 control system.

TABLE 8.2B - COMPARISON OF CBCP MERCURY EMISSIONS WITH EPRI AND DOE FINDINGS

Source	Control System	Number of Tests	Hg Emissions (µg/Nm^3)	
			Mean	95% CI
EPRI/DOE	Electrostatic Precipitator	19	8.17	1.69
EPRI/DOE	Fabric Filter	5	6.98	9.48
EPRI/DOE	Electrostatic Precipitator with Fabric Filter	24	7.92	2.14
EPRI/DOE	Flue Gas Desulfurization	9	6.08	3.47
CBCP	CFB with Fabric Filter	9	1.16	0.63

CBCP mercury emissions are the lowest presented, which may be a result of lower coal mercury content, along with control technology differences. The data may indicate a better inherent mercury removal efficiency of the CFB/fabric filter control technology, when compared to the pulverized coal boilers at which most of the DOE and EPRI data was collected.

Cedar Bay Generating Company, Limited Partnership

November 22, 1994

Mr. Hamilton Oven, P.E
Administrator, Office of Siting Coordinator
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

Re: Submission of Phase I Report on Mercury Control Testing

Dear Mr. Oven:

The Cedar Bay Generating Company (CBGC), Limited Partnership, is pleased to submit the enclosed Phase I Report on Mercury Control Testing.

Key findings from the test report include:

* Average CFB boiler mercury emissions are 1.16 micrograms per cubic meter,

* Even though CBGC was unable to close its modeled mercury mass balance equation, a conservative estimate of mercury removal efficiency is 41 percent, and

* Given CBGC's plant design characteristics, little potential for substantial additional mercury removal using carbon injection exists.

The average CFB boiler mercury emission rate is lower than CBGC's proposed cutoff limit of 3.0 micrograms per cubic meter. Assessing the effectiveness of carbon injection would be difficult, if not impossible, at levels below this cutoff value, due to interferences caused by independent variables. Given our Phase I results, and the low probability that carbon injection testing would provide meaningful data for determining whether carbon injection could provide substantial additional mercury removal, we propose to cancel Phase II testing.

CBGC trusts that the information contained in the report will contribute to DEP's mercury emissions knowledge base. CBGC would be pleased to present the report findings to you or members of your staff. Should you desire a presentation, or should you or members of your staff wish to discuss the report, please contact me at (301) 718-6937.

Sincerely,

Barrett Parker

Enclosure

7500 Old Georgetown Road • Bethesda, Maryland 20814-6161 • 301-718-6800 • Fax 301-718-6900
An affiliate of U.S. Generating Company

cc: C. Fancy, DEP
C. Kirts, DEP, NED
R. Pace, RESD

Florida Department of
Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT SURRENDER

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. John L. West, General Manager
Seminole Kraft Corporation
P.O. Box 26998
Jacksonville, FL 32218-0998

Re: Duval County - Air Pollution
Power Boiler Nos. 1, 2, 3, Bark Boiler Nos. 1, 2
Permit Nos. AO16-228848, AO16-228449, AO16-228451
AO16-225702, AO16-225701
I.D. Nos. 31-16-0067-06, 31-16-0067-07, 31-16-0067-08
31-16-0067-04, 31-16-0067-05

Dear Mr. West:

The City of Jacksonville Regulatory and Environmental Services Department (RESD) Air Quality Division (AQD) and the State of Florida Department of Environmental Protection (DEP) have approved the surrender of the referenced permits effective July 22, 1994.

AQD and DEP will accept the surrender of the referenced permits as authorized by Florida Administrative Code (F.A.C.) Rule 17-4.100(1) and Section 403.061(14) Florida Statutes (F.S.). Please attach this Notice of Permit Surrender to your copy of the permits.

Executed in Jacksonville, Florida

City of Jacksonville
Regulatory and Environmental
Services Department
Air Quality Division

Robert S. Pace, P.E.,
Division Chief

State of Florida
Department of Environmental
Protection

Ernest E. Frey, P.E.
For Director of District Management

Attachment to be Incorporated
Seminole Kraft Corporation letter dated July 22, 1994

c: Mr. Robert Leetch, P.E., DEP/NED
Mr. Bruce Mitchell, DEP/BAR/TALLA
Mr. Jerry Woosley, AQD
Mr. Wayne Tutt, AQD
AQD Air Permitting File
AQD File 2155 C,D,E,I,J,Y
AQD File 1065-C

Disk: S:/Roberson/E-permit/Boilers5

cc'd: John Brown } 8/24/94
Clair Fancy
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 8/22/94 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Linda Bratton 8/22/94
Clerk Date

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

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

DER File No. PSD-FL-137A
Duval County

/

Enclosed is revised/amended Permit Number PSD-FL-137A for the Cedar Bay Cogeneration Project at the existing Seminole Kraft Corporation facility in Jacksonville, Duval County, Florida. This permit is issued pursuant to Section(s) 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 11/23/93 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

Barbara F. Pontwell (Clerk) 11/23/93 (Date)

Copies furnished to:

E. Frey, NE District
S. Pace, RESD
B. Oven, DEP
R. Donelan, Esq., OGC
J. Harper, EPA
J. Bunyak, NPS

Final Determination

Cedar Bay Cogeneration, Inc.
Duval County, Florida

Construction Permit No.
PSD-FL-137A

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

November 16, 1993

Final Determination

Cedar Bay Cogeneration, Inc.

PSD-FL-137A

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 air permit PSD-FL-137) 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 (Department). In that Settlement 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.

Paragraph 23 of that Settlement Stipulation calls for an amendment of the original air permit (PSD-FL-137) for the Project to reflect the modifications that are applicable to the Project's air 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), the Department has determined that the original air permit should be revised to reflect the changes noted in the Settlement Stipulation. On September 24, 1993, the Department sent a proposed revised air permit (PSD-FL-137A) to EPA, recommending that it officially revise the original air permit to incorporate these changes. Since EPA granted the Department full delegation of PSD permitting authority for Power Plants by letter dated October 26, 1993, EPA's response to the Department dated November 3, 1993, recommended that the Department issue the revised air permit.

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

A. Lower the limitations applicable to the emissions from the circulating fluidized bed boilers (CFBs) of SO_2, NO_x, CO, PM, PM-10, H_2SO_4, fluorides, lead, mercury, and beryllium consistent with the Conditions of Certification.

1. The restrictions on the sulfur content of the coal fired in the CFBs have been tightened, and the CBC will make operational changes in the limestone injection system to comply with the lower emission limitations for SO_2 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 SO_2, 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 gals/yr to 1.9 million gals/yr.
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 Department's findings that these emission reductions will in turn reduce the air quality impacts from the Project. In February of this year, ENSR submitted to the Department its "CBCP Air Quality Analysis;" and in March of this year, a number of replacement pages for this report were filed with the Department. 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 the Department reported in its March 25, 1993 staff report on the Project, the Project complies with all air quality requirements. Specifically, the CBCP will continue to comply with applicable PSD requirements: (1) the control technology planned for the CBCP will satisfy BACT requirements for all pollutants subject to new source review; (2) the emissions from the CBCP will not cause or contribute to a violation of the ambient standards or the PSD increments; (3) the CBCP will not have an adverse impact on the air quality related values of any class I area; (4) the CBCP will not adversely affect visibility, soils, or vegetation having significant commercial or recreational value; and, (5) analyses show that any growth associated with the CBCP will not have significant air quality impacts.

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

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

Under EPA's guidance on permit modifications, changes that do not involve increases in source emissions or in air quality impacts may be considered permit "amendments," which may be accomplished through simple administrative action without further public review or proceedings. (United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985) at p. 11.) No increases in emissions or air quality impacts will occur for the Project. Accordingly, the Department finds that there is no need for public notice or comment prior to revising the original air permit PSD-FL-137 (PSD-FL-137A) consistent with the final determination.

Because EPA Method 29 is not a Department approved test method for mercury and was not an approved test method in the previously issued construction permit PSD-FL-137, the test method has been deleted from Specific Condition No. II.A.8.e.(15). If the method is the desired method for testing for mercury over the approved EPA Method 101A, the method may be requested pursuant to Rule 17-297.620, Florida Administrative Code, Exceptions and Approval of Alternate Procedures and Requirements.

Since all pending controversies and hearings have been resolved and the modification of Certification has been finalized, it is recommended that this proposed final permit revision, No. PSD-FL-137A, be approved and signed.

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

PERMITTEE:
Cedar Bay Cogeneration, Inc.
7475 Wisconsin Avenue
Bethesda, Maryland 20814-3422

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

This air permit is issued for the Cedar Bay Cogeneration Project (CBCP) under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-210 through 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 of Environmental Protection (Department) and specifically described as follows:

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

The three CFB boilers, each rated at a maximum of 3,189 MMBtu/hr heat input, will fire fuel made up largely or exclusively of coal, with the possibly that two CFBs will fire some short fiber recycle rejects from the SKC facility. 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 SKC facility.

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%, by weight, and the inherent scrubbing provided by the CFB technology; also, the No. 2 fuel oil, which will be fired by the CFB auxiliary fuel burners (normally only for startup) and by other process equipment, will be limited to a maximum sulfur content of 0.05%, by weight. Particulate matter will be controlled with fabric filters.

The existing SKC facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

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. Mr. Patrick Tobin's letter dated October 26, 1993.
7. Ms. Jewell A. Harper's letter dated November 3, 1993.
8. DEP's Final Determination dated November 16, 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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

GENERAL CONDITIONS cont.:

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of non-compliance; and,

b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

GENERAL CONDITIONS cont.:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
(x) Determination of Prevention of Significant Deterioration and Nonattainment Areas NSR
(x) Compliance with New Source Performance Standards (NSPS; Subpart Da)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

GENERAL CONDITIONS cont.:

c. Records of monitoring information shall include:

- The date, exact place, and time of sampling or measurements;
- The person responsible for performing the sampling or measurements;
- The dates analyses were performed;
- The person responsible for performing the analyses;
- The analytical techniques or methods used; and,
- The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

II. SPECIFIC CONDITIONS:

General: The construction and operation of Cedar Bay Cogeneration Project (CBCP) shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, CBCP shall comply with the following conditions as indicated, which reflect the conditions of the Modification of Certification dated May 11, 1993:

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

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

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the Seminole Kraft Corporation (SKC) recycling process shall not exceed 210 yd^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.

SPECIFIC CONDITIONS cont.:

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 the 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 Nos. II.A.1.a., 1.b. and 1.e. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of the Department of Environmental Protection pursuant to Specific Condition No. II.E., Modification of Conditions.

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

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

SPECIFIC CONDITIONS cont.:

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 Department, RESD and EPRI, CBC shall submit a mercury control test protocol to the Department for approval by December 1, 1993. Results of the test shall be submitted to the Department 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:

01/03/03

Pollutant	lbs/MMBtu	Emission Limitations lbs/hr.	TPY	TPY for 3 CFBs
CO	0.175[1]	186[1]	758	2273
NOx	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~~ Assume all
PM_{10}	0.018	19.1	78	234 PM10
H2S04 mist	4.66×10^{-4}	0.50	2.0	6.1 per APTS
Fluorides	7.44×10^{-4}	0.79	3.2	9.7
Lead	6.03×10^{-5}	0.06	0.26	0.78
Mercury	2.89×10^{-5}	0.03	0.13	0.38
Beryllium	8.70×10^{-6}	0.01	0.04	0.11

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

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

SPECIFIC CONDITIONS cont.:

4. Ammonia (NH_3) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

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

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR 60 and 61, Chapter 17-297, F.A.C., and listed in Specific Condition No. II.A.8. of this permit or by equivalent methods after obtaining prior written Department approval. In addition, compliance with the emission limitations in Specific Condition No. II.A.3. for CO, NOX and SO_2, and with the opacity requirements in Specific Condition No. II.A.5., shall be determined with the continuous emission monitoring systems (CEMS) identified in Specific Condition No. II.A.9.

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

8. Compliance Tests for each CFB

a. Initial and subsequent compliance tests for PM/PM_{10}, SO_2, NOx, CO, VOC, lead, fluorides, ammonia, mercury, beryllium and H_2SO_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. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

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

e. The following test methods and procedures pursuant to Chapter 17-297, F.A.C., and 40 CFR 60 and 61, or by equivalent methods after obtaining prior written Department approval, shall be used for compliance testing:

(1) Method 1 for selection of sample site and sample traverses.

(2) Method 2 for determining stack gas flow rate.

(3) Method 3 or 3A for gas analysis for calculation of percent O_2 and CO_2.

SPECIFIC CONDITIONS cont.:

(4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.

(5) Method 5 or Method 17 for particulate matter.

(6) Method 6, 6C, or 8 for SO_2.

(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 for mercury.

(16) Method 104 for beryllium.

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

(18) Ammonia (NH_3) method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain CEMS for opacity, SO_2, NO_X, CO, and O_2 or CO_2, pursuant to all applicable requirements of Rule 17-296.800, F.A.C.; Chapter 17-297, F.A.C.; 40 CFR 60, Subpart A; 40 CFR 60, Subpart Da; 40 CFR 60, Appendix B; and, 40 CFR 60, Appendix F. These CEMS shall be used to determine compliance with the emission limitations in Specific Condition No. II.A.3. for CO, NOx, and SO_2, and with the opacity requirements in Specific Condition No. II.A.5. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span CEMS for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the CEMS for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by the

SPECIFIC CONDITIONS cont.:

exception to the above must be specifically authorized by the Department, in writing, and in accordance with state and federal regulations.

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

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

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

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

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

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

10. Operations Monitoring for each CFB

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

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

11. Reporting for each CFB

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

SPECIFIC CONDITIONS cont.:

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

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

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

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

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

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

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

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

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

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

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

SPECIFIC CONDITIONS cont.:

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

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

B. CBCP - Material Handling and Treatment

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

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

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; and, TPY is tons per year.

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

4. Material handling sources shall be regulated as follows:

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

Coal Crusher Building 6
Coal Silo Conveyor 7
Limestone Pulverizer/Conveyor 8
Limestone Storage Bin 9
Bed Ash Hopper 10
Bed Ash Silo 11
Fly Ash Silo 12
Bed Ash Bin 13
Fly Ash Bin 14
Pellet Vibratory Screen 15
Pelletizing Ash Recycle Tank 16
Pelletizing Recycle Hopper 17
Cured Pellet Recycle Conveyor 18
Pellet Recycle Conveyor 19

The emissions from the above listed sources are subject to the PM emission limitation requirement of 0.003 gr/dscf (applicant

Cured Pellet Load out Conveyor ?
Curing Silo Discharge Baghouse

SPECIFIC CONDITIONS cont.:

requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

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

~~Coal Car Unloading~~ 20 Fugitive Source
Ash Pellet Hydrator 21
Ash Pellet Curing Silo 22
Ash Pelletizing Pan 23

The above listed sources are subject to a VE and a PM emissions 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 emissions using EPA Methods 9 and 5, respectively, in accordance with Chapter 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1992 version).

5. VE shall not exceed 5% opacity from any source in the material handling and treatment area listed in Specific Condition No. II.B.4., in accordance with Rule 17-296.711(2)(a), F.A.C. After the one-time PM mass emissions verification compliance tests have been performed, neither the Department nor the RESD will require a PM mass emissions test in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless the Department or the RESD, based on other information, has reason to believe that the PM emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.

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

SPECIFIC CONDITIONS cont.:

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):

09,05

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

VE 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 emissions and VE compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1992 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.

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

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

C. Requirements For the Permittees

1. Beginning one month after certification, CBCP shall submit to the RESD and the Department'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.

SPECIFIC CONDITIONS cont.:

3. Reasonable precautions to prevent fugitive PM 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 60, Subpart Da.

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

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

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

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

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

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

D. Contemporaneous Emission Reductions

The following SKC sources shall be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Department's BAR, within 30 days of written confirmation by the Department of the successful completion of the initial compliance tests on the CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler),and the No. 2 BB. The RESD office 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

SPECIFIC CONDITIONS cont.:

requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

E. Modification of Specific Conditions

The Specific Conditions of this permit may be modified in the following manner:

1. Through the May 11, 1993 Modification of Certification, the Board, which means the Governor and Cabinet, delegated to the Secretary of Department of Environmental Protection the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this permit.

2. All other modifications shall be made in accordance with Section 403.516, F.S.

Issued this 19th day

of November ,1993

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Virginia B. Wetherell

Virginia B. Wetherell, Secretary

Florida Department of
Memorandum Environmental Protection

TO: Virginia B. Wetherell

FROM: Howard L. Rhodes

DATE: November 16, 1993

SUBJECT: Approval of Revised/Amended Air Construction Permit
PSD-FL-137A
Cedar Bay Cogeneration, Inc.

Attached for your approval and signature is a revised/amended air construction permit (PSD-FL-137A), which is the result of a modification of a previously issued Power Plant Site Certification and air permit (PSD-FL-137). The proposed revision was prepared by the Bureau of Air Regulation, since EPA granted full delegation of PSD permitting authority of Power Plants on October 26, 1993.

The facility, consisting of three new coal-fired boilers, was originally certified pursuant to the Florida Power Plant Siting Act in March of 1991. In the summer of 1992, a proceeding was initiated to revise the State's requirements for the project. That proceeding culminated in a Stipulation of Settlement, entered into by all parties and approved by the Siting Board on May 11, 1993. The Siting Board's Order calls for significant reductions to both the Cedar Bay Cogeneration Project's (Project) air emissions and its air quality impacts. To establish federally enforceable conditions, Paragraph 23 of that Settlement Stipulation calls for an amendment of the original air permit (PSD-FL-137) for the Project to reflect the modifications that are applicable to the Project's air permit.

The facility will be located in Jacksonville, Duval County, Florida. All pending controversies and hearings have been resolved and the modification of Certification has been finalized.

I recommend your approval and signature.

HLR/BM/rbm

Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

September 24, 1993

9-25-93
CERTIFIED MAIL - RETURN RECEIPT REQUESTED (Fed X'd:

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

Re: Amendment/Revision of Permit No. PSD-FL-137

Dear Ms. Harper:

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

The Department finds the proposed revisions acceptable and has drafted the enclosed revised permit, No. PSD-FL-137A. Also enclosed for your review is a summary of and the record in the proceeding to modify the certification for the Project and a marked-up version of the previous permit, No. PSD-FL-137. Because this facility is subject to Florida's Power Plant Certification regulations, we request that EPA review and approve the enclosed draft and revised permit.

Sincerely,

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

CHF/BM/rbm

Enclosures

cc: S. Pace, RESD
E. Frey, NED
R. Donelan, Esq., OGC
B. Owen, PPS
K. Fickett, CBCI Fed X'd: 9-23-93

9-23-93 BM RDon

Final Determination

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

Permit No. PSD-FL-137A

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

Septemnber 24, 1993

Final Determination

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

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

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

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

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

A. Lower the limitations applicable to the emissions from the circulating fluidized bed boilers (CFBs) of SO_2, NO_x, CO, PM, PM-10, H_2SO_4, fluorides, lead, mercury, and beryllium consistent with the Conditions of Certification.

1. The restrictions on the sulfur content of the coal fired in the CFBs have been tightened, and the CBC will make operational changes in the limestone injection system to comply with the lower emission limitations for SO_2 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 SO_2, 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 paragraph 2 of the Settlement Stipulation and in the final action taken by the Siting Board on the Conditions of Certification for the CBCP on May 11, 1993.

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

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

CERTIFICATE OF SERVICE

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

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

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

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

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

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

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

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

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

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

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

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

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

this 13th day of May, 1993.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

R T Donelan, Jr.

RICHARD T. DONELAN, JR.
Assistant General Counsel

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

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

DONE AND ORDERED this 11th 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 Clerk, receipt of which is hereby acknowledged.

Clerk 5-14-93 Date

BY THE GOVERNOR AND CABINET,
SITTING AS THE SITING BOARD

Lawton Chiles, Governor

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

IN RE: POWER PLANT SITE CERTIFICATION OF CEDAR BAY COGENERATION PROJECT, PA-88-24	DOAH Case No. 88-5740 OGC Case No. 88-1089

FINAL ORDER APPROVING MODIFICATION OF CERTIFICATION

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

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

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

Accordingly, the Board ORDERS:

1. The certification for the Cedar Bay Cogeneration Project, PA 88-24, issued February 18, 1991, is MODIFIED. The Conditions of Certification contained in Appendix A shall henceforth apply to govern construction and operation of the Cedar Bay Cogeneration Project in accordance with Section 403.511, Florida Statutes (Supp. 1992).

2. The certification is further MODIFIED to reflect that the name of certificate holder AES Cedar Bay, Inc. has been changed to Cedar Bay Cogeneration, Inc.

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

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

(Revised 4/12/93)

CONDITIONS OF CERTIFICATION

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APPENDIX A

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

CONDITIONS OF CERTIFICATION

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

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

I. GENERAL

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

II. AIR

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

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

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

b. The maximum charging rate to each of two CFBs of short fiber recycle rejects from the SK recycling process shall not exceed 210 yd^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.1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DEP pursuant to condition XXI, Modification of Conditions.

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

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

2. Coal Fired Boiler Controls

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

a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.

b. Baghouse, for control of particulate matter.

c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.

d. Selective Non-catalytic Reduction (SNCR) for control of NOx.

e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

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

		Emission Limitations		
Pollutant	lbs/MMBtu	lbs/hr.	TPY	TPY for 3 CFBs
CO	0.175 [1]	186 [1]	758	2273
NOx	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
H2S04 mist	4.66e-04	0.50	2.0	6.1
Fluorides	7.44e-04	0.79	3.2	9.7
Lead	6.03e-05	0.06	0.26	0.78
Mercury	2.89e-05	0.03	0.13	0.38
Beryllium	8.70e-06	0.01	0.04	0.11

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

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

4. Ammonia (NH_3) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

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

6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1992 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. II.A.8 of this permit or by equivalent methods after prior written DEP approval. In addition, compliance with the emission limitations in Condition No. II.A.3 for CO, NOX and SO_2 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_2SO_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 SO_2.

(7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.

(8) Method 8 for sulfuric acid mist.

(9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.

(10) Method 10 for CO.

(11) Method 12 for lead.

(12) Method 13A or 13B for fluorides.

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

(14) Method 18 or 25 for VOCs.

(15) Method 101A or EPA Method 29 for mercury.

(16) Method 104 for beryllium.

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

(18) Ammonia (NH_3) Method to be determined by the Department.

9. Continuous Emission Monitoring for each CFB

CBCP shall install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO_2, NO_x, CO, and O_2 or CO_2, 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 SO_2 and with

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

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

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

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

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

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

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

10. Operations Monitoring for each CFB

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

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

11. Reporting for each CFB

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. CBCP - Material Handling and Treatment

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

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

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., 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/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., 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):

	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
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 SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SK, SK may notify the Department that it must exceed the ceiling as provided herein; and emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within Seminole Kraft's control. In no event shall the annual emissions of SO_2 from the steam boilers referenced above exceed a ceiling of 41 tons per year.

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

III. WATER DISCHARGES

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

A. Plant Effluents and Receiving Body of Water

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

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

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

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

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

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

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

7. Storm Water Runoff

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

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

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

b. Operation

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

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

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

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

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

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

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

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

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

B. Water Monitoring Programs

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

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

3. Coal, Ash, and Limestone Storage Areas

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

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

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

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

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

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

IV. GROUND WATER

A. Water Well Construction Permit

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

B. Well Criteria, Tagging and Wellfield Operating Plan

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

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

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

C. Maximum Annual Withdrawals

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

D. Water Use Transfer

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

E. Emergency Shortages

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

F. Monitoring and Reporting

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

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

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

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

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

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

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

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

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

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

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

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

G. Ground Water Monitoring Requirements

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

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

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

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

H. Leachate

1. Zone of Discharge

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

2. Corrective Action

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

I. Water Use Audit

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

J. Water Conservation Awareness Program

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

V. CONTROL MEASURES DURING CONSTRUCTION

A. Storm Water Runoff

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

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

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

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

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

B. Sanitary Wastes

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

C. Environmental Control Program

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

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

D. Construction Dewatering Effluent

There shall be no discharge of construction dewatering effluent.

VI. SAFETY

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

VII. SCREENING

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

VIII. TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS

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

IX. SOLID WASTE STORAGE AND DISPOSAL

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

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

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

X. CHANGE IN DISCHARGE

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

XI. NONCOMPLIANCE NOTIFICATION

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

A. A description and cause of noncompliance; and

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

XII. FACILITIES OPERATION

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

XIII. ADVERSE IMPACT

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

XIV. RIGHT OF ENTRY

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

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

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

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

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

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

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

XV. REVOCATION OR SUSPENSION

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

XVI. CIVIL AND CRIMINAL LIABILITY

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

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

XVII. PROPERTY RIGHTS

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

XVIII. SEVERABILITY

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

XVIV. DEFINITIONS

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

XX. REVIEW OF SITE CERTIFICATION

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

XXI. MODIFICATION OF CONDITIONS

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

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

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

XXII. FLOOD CONTROL PROTECTION

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

XXIII. EFFECT OF CERTIFICATION

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

XXIV. NOISE

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, each permittee shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise. The permittees shall comply with the applicable noise limitations specified in Environmental Protection Board Rules or The City of Jacksonville Noise Ordinance.

XXV. USE OF WATER FOR COOLING PURPOSES

The CBCP shall use reclaimed wastewater from the Seminole Kraft paper mill (in addition to any wastewater generated by the CBCP that is suitable for reuse for that purpose) for cooling water supply. In the event of disruption of SKC reclaimed wastewater as the cooling water makeup source for Cedar Bay, Inc., Cedar Bay, Inc. will utilize the water retained in SKC's holding basins or other non-potable sources of water as cooling water makeup.

At least 90 days prior to beginning commercial operation, Cedar Bay Cogeneration, Inc. shall submit to the Department a report concerning the actual measured pollutant characteristics of reclaimed water to be obtained from the Seminole Kraft paper mill. Such report shall be based on approved analytical results from four monthly samples obtained directly from the Seminole Kraft waste stream to be tied in with the CBCP cooling system, and shall include the concentrations of BOD5, COD, total organic carbon, total suspended solids, ammonia, pH, oil and grease, calcium, magnesium, sodium, potassium, alkalinity as mg of $CaCO_3$, sulfate, chloride, nitrate, fluoride, silica, chlorine, phosphate (total) as P, cyanide, iron, manganese, aluminum, nickel, zinc, copper, cadmium, chromium, beryllium, arsenic, selenium, antimony, mercury, barium, silver, lead, thallium, phosphorus, and TKN. Where applicable, wastewater sampling and analyses conducted by SKC under the terms of operation permit number I016-200147 may be used to meet the terms of this condition. Any other sampling and analyses submitted under the terms of this permit shall be in accordance with a Department-approved Quality Assurance Plan. Results of all testing and sampling specified above shall be submitted to the Department within 30 days of testing.

Seminole Kraft's generation, treatment, or discharge of its wastewater is not covered by this site certification, and the permitting of Seminole Kraft's generation, treatment, or discharge of its wastewater does not require Siting Board approval.

XXVI. ENFORCEMENT

A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.

B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

C. RESD may initiate any and all lawful actions to enforce the conditions of this certification that are based on the Department's rules, after obtaining the Secretary's written permission to so process on behalf of the Department.

XXVII. ENDANGERED AND THREATENED SPECIES

Prior to start of construction, CBCP shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

XXVIII. ENVIRONMENTALLY SENSITIVE LAND ACQUISITION

a. Periodic Payments

1. As a condition of this certification, CBCP shall be required to make periodic monetary contributions for the purpose of funding a program for the acquisition and management of environmentally sensitive lands in Duval County, Florida. These payments shall be made to The Nature Conservancy, Inc., in trust for the State of Florida, to be used as provided in Section B below; and to the City of Jacksonville Environmental Land Acquisition Trust Fund, to be used as provided in Section C below.

2. The two million dollar payment made by or on behalf of the AES Corporation to The Nature Conservancy, Inc.,(TNC) on or about June 16, 1992, shall be deemed to be the first of two periodic payments, totaling 4.5 million dollars, which the CBCP is obligated to make to TNC under this condition. The second periodic payment, 2.5 million dollars, shall be transmitted within 48 hours of the date on

which the CBCP commences commercial operation. TNC shall hold all funds received from CBCP or on behalf of CBCP in trust for the State of Florida.

3. Commencing on the anniversary of the second payment required by subsection (2) above, and continuing each year for 30 years thereafter, a payment of $300,000 shall be submitted to the City of Jacksonville for each year that the CBCP remains in commercial operation. Each annual payment shall be transmitted within 48 hours of the anniversary of the date on which commercial operation commenced at CBCP, and shall be deposited in the Jacksonville Environmental Land Acquisition Trust Fund (JELATF) established by § 110.362 of the Jacksonville Ordinance Code.

4. Any failure to achieve timely transmission of a periodic payment required by this condition shall be grounds for revocation of the certification.

5. All funds attributable to the periodic payments required by this condition shall be received, held, disbursed, and expended in conformance with the applicable provisions of this Condition.

6. The express intent of this Condition is to assure that these periodic payments fund the acquisition of lands possessing substantial ecological value to the ecosystem of the St. Johns River watershed; and that lands acquired with funds provided under this condition be managed to retain or enhance the ecological values for which they were acquired. Funds made available under this Condition shall not be used for the development of urban recreational facilities which conflict with the natural resource values of a site. Prohibited facilities include ball fields or courts, playgrounds, and other developed amenities which are not dependent on ecological conditions for their existence and which are not ancillary to public access for recreational enjoyment of the available natural resources.

7. Properly managed natural resource-based recreation which does not degrade the ecological values of a site shall be encouraged through the development of appropriate management plans which shall be approved by the Department for any tract purchased under this Condition. Management of any site shall be consistent with the acquisition criteria specified in this Condition and shall be coordinated with other managers of natural lands in the region, such as the Department, the St. Johns River Water Management District, the National Park Service, the Division of Forestry, and the Florida Game and Fresh Water Fish Commission.

8. Funds made available under this Condition may be used to participate in existing public and private environmental land acquisition programs such as the Conservation and Recreational Lands Program (CARL), Save Our Rivers (SOR), Florida Communities Trust (FCT), Land

Acquisition Trust Fund (LATF), Preservation 2000, The Nature Conservancy, and other similar programs consistent with the intent behind this condition.

b. Land Acquisition Process: State of Florida

1. All land acquisition and management activities funded by the certification for the use and benefit of the State of Florida or its designee shall be undertaken in accordance with the process established by this Section.

2. The Nature Conservancy (TNC) shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this condition. The Department and TNC shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. There shall be a six member Land Acquisition and Management Advisory Council (LAMAC) comprising two representatives appointed by each of the following governmental entities: the Department, the St. Johns River Water Management District, and the City of Jacksonville. TNC shall appoint a representative to serve as chair of the LAMAC. The LAMAC shall hold one or more public hearings for the purpose of receiving public input as to lands potentially suitable for acquisition under this Section. Following appropriate public input, the LAMAC shall report its findings to the Department.

4. After review of the LAMAC report, TNC shall identify and list as many land acquisition options as it deems practicable. A copy of the list shall be submitted to each of the entities represented on the LAMAC. In establishing this list, TNC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

The LAMAC shall review and approve the land acquisition options list before any parcels are acquired under this condition.

5. Following approval of the list, TNC shall initiate selection of parcels to be acquired. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Secretary of the Department of a proposed acquisition, the parcel shall be purchased by TNC in trust for the State of Florida.

6. Title to any parcel purchased under this condition shall ultimately vest in a governmental entity following a determination by the Secretary of the Department, after consultation with the LAMAC, as to how the property can be managed most appropriately in the public interest. It is understood that title to a newly-purchased parcel may initially vest in TNC pending this determination and transfer of the title to an appropriate government entity or entities for management. The Siting Board hereby delegates to the Secretary of the Department the authority to select the governmental entity or entities most suitable to hold title and manage any property purchased under this condition. Upon notification from the Department that the selection has occurred, TNC shall forthwith execute a transfer of title to the designated entity or entities.

7. TNC shall be entitled to receive reimbursement from funds held by it under this Condition for any costs related to the performance of an acquisition under this Section. TNC may expend on an annual basis up to two per cent of the purchase price of a parcel to which it holds interim title to defray expenses associated with management of that parcel until title can be transferred as specified in subsection (6).

8. TNC is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments required under this condition to be capitalized for immediate utilization in land acquisition or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting TNC to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

c. Land Acquisition Process: City of Jacksonville

1. All land acquisition and management activities funded by Section A.3 of this Condition for the use and benefit of the City of Jacksonville or its designee shall be undertaken in accordance with the process established by this Section.

2. The Real Estate Division of the City of Jacksonville Public Works Department or another appropriate governmental entity shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this Condition. The Department and the City of Jacksonville shall enter into an agreement which incorporates the provisions of this Condition and such other provisions not inconsistent with this Condition that the Department finds necessary to assure that this Section is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.

3. The City of Jacksonville, acting through the Jacksonville Environmental Land Selection Committee (JELSC) established by Mayoral Executive Order 85-81, as amended by Executive Order 91-147, pursuant to § 110.362 of the Jacksonville Ordinance Code, shall identify and list as many land acquisition options as it deems practicable. In establishing its list, JELSC shall consider:

a. the regional environmental importance of each parcel of property, taking into account its proximity to water bodies and other publicly-held land;

b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and

c. the potential of each parcel for environmental enhancement, restoration, and natural resource-based recreational uses.

d. the goals, objectives, and policies of the Conservation/Coastal Management element of the City's Comprehensive Plan, as amended.

A copy of the JELSC list, as it may be amended from time to time, shall be supplied to the Department and to the St. Johns River Water Management District. JELSC shall furnish a copy of the list upon its initial preparation and after any subsequent amendment thereto.

4. Lands to be acquired under this Section with funds made available in whole or in part under this Condition may be acquired only with the concurrence of the Jacksonville City Council and the Department. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site, including parcels within or adjacent to the Timucuan Ecological and Historical Preserve managed by the National Park Service. Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other entities to supplement funds available under this condition. After approval by the Department and the City Council of a proposed acquisition, the parcel shall be purchased by the City.

5. With the approval of the Department and the City Council, title to land acquired under this Section may be sold or transferred to a governmental entity to facilitate effective and beneficial management of the parcel. Any funds received by the City as a result of sale or transfer of property previously acquired under this Section shall be deposited in the JELATF and remain subject to the provisions of this Condition.

6. Any funds paid by CBCP to the JELATF in fulfillment of this Condition or in accordance with any other Condition of Certification may be used for the purpose of managing lands acquired under this Section.

7. The City of Jacksonville is hereby authorized to explore and enter into financing arrangements which will allow the expected proceeds of the periodic payments available under this Section to be capitalized for immediate utilization in land acquisition and management or for appropriate installment payments in the event that it is possible to defer full payment for a parcel over a number of years. CBCP shall cooperate to the maximum extent in assisting the City to achieve such alternate financing arrangements for the benefit of the public as may be practicable.

8. Sale or transfer of any parcel acquired under this Section shall be subject to a reversionary interest retained by the Board of Trustees of the Internal Improvement Trust Fund. In the event that the property ever ceases to be used and managed for environmental purposes consistent with this Condition, ownership of the property shall immediately revert to the State of Florida.

XXIX. TRANSFER OF CERTIFICATION

If the Cedar Bay Cogeneration Project is sold or legally transferred to another owner, notice of such sale or transfer shall immediately be submitted to the Florida Department of Environmental Protection and the agency parties to this certification by the previous certification holder (permittee) and the assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

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,

Barry D. Andrews

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

CHF/kt

enclosure

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

CERTIFICATE OF SERVICE

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

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

Kyri Dober
Clerk

3-29-91
Date

Final Determination

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

Permit No: PSD-FL-137

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

March 28, 1991

Final Determination

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

Public Notice

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

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

BACT Analysis

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

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

Florida Department of Environmental Regulation
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400
Lawton Chiles, Governor
Carol M. Browner, Secretary

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

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

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

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

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

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

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

Attachments:

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

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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,

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.

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.

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

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

2. Coal Fired Boiler Controls

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

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

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

		Emission Limitations		
Pollutant	lbs/MMBtu	lbs/hr	TPY	TPY for 3 CFBs
CO	0.19	202	823	2468
NOx	0.29	308.3	1256	3767
SO_2	0.60 (3-hr avg.)	637.8	--	--
	0.31 (12 MRA)	329.5	1338	4015
VOC	0.015	16.0	65	195
PM	0.020	21.3	87	260
PM_{10}	0.020	21.3	86	257
H_2SO_4 mist	0.024	25.5	103	308
Fluorides	0.086	91.4	374	1122
Lead	0.007	7.4	30	91
Mercury	0.00026	0.276	1.13	3.4
Beryllium	0.00011	0.117	0.5	1.5

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

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

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

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

7. Compliance Tests for each CFB

a. Initial compliance tests for PM/PM_{10}, SO_2, 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, 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 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 SO_2.
(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.

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.

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.

B. AES - Material Handling and Treatment

1. The material handling and treatment operations may be continuous, i.e. 8760 hrs/yr.

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

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

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

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

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

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

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

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):

	Estimated Limitations		
Pollutant	lbs/hr	TPY	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 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).

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.

D. Contemporaneous Emission Reductions

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

Issued this 28th day
of March, 1991

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Carol M. Browner, Secretary

Cedar Bay

Due 3/1/95 — 86,725.50

pd. 3/31/95 — 120,812.33

+ 43,941.21

Due 3/31/95 Fee+ 50.667% — 130,666.71

Less Pd. — 120,812.33

9854.38

9896.00

− 9854.38

43.62 overpaid

86725.50 × 1% = 867.26 > $50

43.62 < $50.00

86,725.50 + 6540.50 = 93,266.00

43,941.21 + 3357.50 = 47,298.71

$140,564.71

0,725.5

.334% = 44519.67

131,245.17

120812.33

10,432.84

5.50
11.21
666.71
812.33
54.38

X + 50.667% = 9854.38 − 6540.50