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March 9, 2001

Mr. Tom Cascio  
 Florida Department of Environmental Protection  
 Bureau of Air Regulation  
 2600 Blair Stone Road  
 Tallahassee, FL 32399-2400

**Subject: Cedar Bay Generating Co., L.P.**  
**Title V Permit No.: 0310337002AV**

*Project No. : 0310337-003-AV*

Dear Mr. Cascio:

Per our discussion on Tuesday, February 27, 2001, we are supplying this proposed modification to the Title V air permit for Cedar Bay Generating Co., L.P. We are requesting modifications to reflect modifications to Permit PSD-FL-137, and to document the retirement of ash pelletizing equipment.

Telephone

978.371.4000

**PSD Permit Modifications:** On March 9, 2000, the Florida DEP Division of Air Resource Management issued a letter modifying the conditions of the air permit PSD-FL-137. The modification "is to allow the three fluidized bed circulating boilers (A, B and C) to operate with changes to their method of compliance for startup and shutdown, SO<sub>2</sub> emissions, mercury testing, heat input and stack testing methodology."

Facsimile

978.371.2468

**Equipment Retirement:** Cedar Bay Generating has determined that the equipment associated with the ash pelletizing operation will not be run again, and there are plans to dismantle this equipment in the near future. This equipment included several particulate emissions sources as listed below. Different numbering systems have been used through the Title V permitting process; we have included different identifiers to help clarify what equipment is being removed:

E.U. ID No.	Brief Description:	Control Device	Application Emission Unit Information Section	Application Page
-013	Pelletizer Bed Ash Receiver Bin	<i>Baghouse A-7</i>	<i>19 of 34</i>	III-396 to 414
-014	Pelletizer Fly Ash Receiver Bin	<i>Baghouse A-8</i>	<i>20 of 34</i>	III-415 to 433
-015	Pellet Vibratory System	<i>Baghouse A-17</i>	<i>28 of 34</i>	III-567 to 585
-016	Pellet Recycle Tank	<i>Baghouse A-10</i>	<i>21 of 34</i>	III-434 to 452
-017	Pelletizing Recycle Hopper	<i>Baghouse A-9</i>	<i>30 of 34</i>	III-604 to 622
-018	Cured Pellet Screening Conveyor System	<i>Baghouse A-14</i>	<i>25 of 34</i>	III-510 to 528
-019	Pellet Recycle Conveyor	<i>Baghouse A-16</i>	<i>27 of 34</i>	III-548 to 566
-021	Ash Pellet Hydrator	<i>Scrubber A-11</i>	<i>22 of 34</i>	III-453 to 471
-022	Ash Pellet Curing Silos	<i>Scrubber A-13</i>	<i>24 of 34</i>	III-491 to 509
-023	Ash Pelletizing Pans	<i>Scrubber A-12</i>	<i>23 of 34</i>	III-472 to 490
-029	Pellet Railcar Loadout	<i>Baghouse A-15</i>	<i>26 of 34</i>	III-529 to 547



A tyco INTERNATIONAL LTD. COMPANY

Mr. Tom Cascio  
FDEP  
March 9, 2001

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In summary, we ask that you consider these pages to be removed from the revised Title V application:

III-396 to III-585

III-604 to III-622

**Application Contents:** Attached to this letter are the following:

- A new, signed Responsible Official Title V form (62-210.900(1), I-2)
- A new, signed and sealed Professional Engineer Statement (62-210.900(1), I-8)
- Revised Title V application forms with handwritten changes indicating the revisions from the original application. We have also included revised forms to address changes in company name and contact persons.
- Proposed new language for the Title V permit. We have tracked the proposed language changes, based on the electronic version of the Title V permit available on the Florida DEP website. Pages with changes are submitted in hardcopy; we are also submitting the proposed permit changes to you electronically. In the main body of the Title V permit, language to be deleted is crossed though. New language is underlined. We have integrated the PSD language into the appropriate areas and crossed out references to pelletizer emission units. In addition, we have attached a file for Appendix PSS-1. This is the appendix that incorporates the startup language as developed in the PSD modification into the Title V permit.
- A copy of the March 9, 2000 PSD modification letter for your reference.

Again, thank you for your time and input. If you have any questions, please do not hesitate to contact me at (978) 371-4339 or Jeff Walker of Cedar Bay Generating at (904) 751-4000 extension 22.

Very truly yours,

EARTH TECH



Andrew Jablonowski, PE  
Senior Engineer.

cc: Jeffrey Walker, Cedar Bay Generating Co., P.O. Box 26324, Jacksonville FL 32226  
Robert DeHart, PG&E National Energy Grou, 7500 Old Georgetown Road, Bethesda MD 20814

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**DIVISION OF AIR RESOURCES MANAGEMENT**

**APPLICATION FOR AIR PERMIT - LONG FORM**

See Instructions for Form No. 62-210.900(1)

**I. APPLICATION INFORMATION**

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

**Identification of Facility Addressed in This Application**

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b>Cedar Bay Generating Company, L.P.</b>	
2. Site Name: <b>Cedar Bay Cogeneration Facility</b>	
3. Facility Identification Number: <b>31DVL160337</b> <input type="checkbox"/> Unknown	
4. Facility Location: <del>U.S. Generating</del> <b>Cedar Bay Facility</b> <i>PG &amp; E National Energy Group</i> Street Address or Other Locator: <b>9640 Eastport Road</b>  City: <b>Jacksonville</b> County: <b>Duval</b> Zip Code: <b>32226</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**Application Processing Information (DEP Use)**

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: Randy Cole, General Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Cedar Bay Generating Company, L. P. Street Address: P.O. Box 20324 City: Jacksonville State: FL Zip Code: 32226
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (904) 751 - 4000 Fax: (904) 751 - 7320
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature: <u>Randy M Cole</u> Date: <u>3-12-01</u>

\* Attach letter of authorization if not currently on file.

Emissions Unit ID	Description of Emissions Unit	Permit Type
026	Fly Ash Collector (Vents through Ash Mechanical Exhausts) (1 ASA-CO-1B)	AF2A
Unknown	Fly Ash Silo Vent Filter (1 ASA-FLT-2), controls truck load out, rail loadout, silo	AF2A
<del>013</del>	<del>Bed Ash Pelletizer Receiver Vent Filter (1 ASF-FLT-2)</del>	<del>AF2A</del>
<del>014</del>	<del>Fly Ash Receiver Vent Filter (1 ASF-FLT-1)</del>	<del>AF2A</del>
<del>016</del>	<del>Recycle Tank Dust Filter (1 ASF-DCO-2)</del>	<del>AF2A</del>
<del>021</del>	<del>Hydrator Venturi Scrubber (1 ASF-SCB-1)</del>	<del>AF2A</del>
<del>023</del>	<del>Pan Impingement Scrubber (1 ASF-SCB-2)</del>	<del>AF2A</del>
<del>022</del>	<del>Curing Silo Impingement Scrubber (1 ASF-SCB-3)</del>	<del>AF2A</del>
<del>018</del>	<del>Curing Silo Dust Filter (1 ASF-DCO-4)</del>	<del>AF2A</del>
<del>029</del>	<del>RR Pellet Load Out Dust Filter (1 ASF-DCO-3)</del>	<del>AF2A</del>
<del>019</del>	<del>Pellet Recycle Belt Head Pulley to Bucket Elevator Dust Filter (1 ASF-DCO-5)</del>	<del>AF2A</del>
<del>015</del>	<del>Pellet Screen Dust Filter (1 ASF-DCO-1)</del>	<del>AF2A</del>
030	Dry Ash Loadout Dust Collector	AF2A
<del>017</del>	<del>Recycle Surge Hopper Filter (500 cfm)</del>	<del>AF2A</del>
Unknown	Zero Discharge WWHU	AF2C
Unknown	Zero Discharge Cooling Tower	AF2C
Notes: AF2A - Initial Certification Test. AF2B - CEMS, or Initial Certification Tests		

**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: PSD-FL-137

Operation permit to be revised: 0310337002 AV

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_  
\_\_\_\_\_

**Application Processing Fee**

Check one:

Attached - Amount: \$ \_\_\_\_\_

Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:
2. Projected or Actual Date of Commencement of Construction:
3. Projected Date of Completion of Construction:

**Professional Engineer Certification**

1. Professional Engineer Name: <del>G. Preston Lewis</del> <b>GEORGE S. LIPKA</b> Registration Number: <del>41755</del> <b>0050359</b>
2. Professional Engineer Mailing Address:  Organization/Firm: <del>ENSR</del> <b>EARTH TECH</b> Street Address: <del>1528 Metropolitan Blvd., Suite A2</del> <b>196 BAKER AVE</b> City: <del>Tallahassee</del> <b>CONCORD</b> State: <del>Florida</del> <b>MA</b> Zip Code: <del>32315</del> <b>01742</b>
3. Professional Engineer Telephone Numbers: Telephone: <del>(904) 385-0808</del> <b>978 371-4000</b> Fax: <del>(904) 385-5457</del> <b>978 371-2468</b>



4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein\*, that:

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

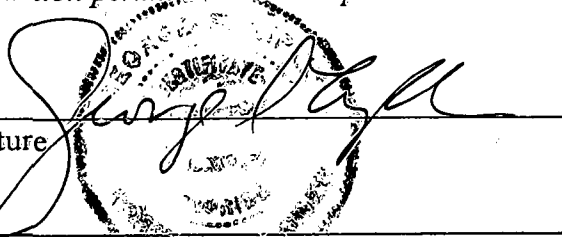
If the purpose of this application is to obtain a Title V source air operation permit (check here [ X ] if so), I further certify that, to the best of my knowledge, each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

(seal)



Date

March 9, 2001

\* Attach any exception to certification statement.

Exception: My certification is limited to the review of changes to the Title V Application as described herein  
GJG

**Application Contact**

1. Name and Title of Application Contact:			
<del>Kevin Grant, Environmental &amp; Safety Manager</del> Jeffrey A. Walker, Environmental Manager			
2. Application Contact Mailing Address:			
Cedar Bay Generating Company, L.P.			
Organization/Firm:	U.S. Generating Company	P.O. Box	26324
Street Address:	9640 Eastport Road	(P.O. Box 2234 - Zip Code: 32317-3206)	
City:	Jacksonville	State:	Florida
		Zip Code:	32315 32226
3. Application Contact Telephone Numbers:			
Telephone:	(904 ) 751-4000	Fax:	(904 ) 751-7320

**Application Comment**

<u>Alternate Contacts for the Application:</u>	
Preston Lewis, P.E.	ENSR Tallahassee (904) 385-0808
Barry Andrews, P.E.	ENSR Florence (205) 767-1210
Keith Field	ENSR Florence (205) 767-1210
Don Beckham	U. S. Generating Company (301) 718-6757

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: 0903 East (km): 441.610 North (km): 441.610			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 30° 25' 21" N Longitude (DD/MM/SS): 81° 36' 23" W			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment (limit to 500 characters):			

#### Facility Contact

1. Name and Title of Facility Contact: <del>Kevin Grant</del> Jeffrey A. Walker			
2. Facility Contact Mailing Address: Organization/Firm: <del>U.S. Generating Company</del> Cedar Bay Generating Company, L.P. Street Address: <del>9640 Eastport Road</del> P.O. Box 26234 City: Jacksonville State: Florida Zip Code: 32226			
3. Facility Contact Telephone Numbers: Telephone: (904 ) 751-4000 Fax: (904 ) 904-751-7320			

## E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

**Pollutant Potential/Estimated Emissions: Pollutant 1 of 12**

1. Pollutant Emitted: SO <sub>2</sub>	
2. Total Percent Efficiency of Control: (Qtrly. Report 4-1-94 to 4-26-96)	89 to 95 %
3. Primary Control Device Code: 041	
4. Secondary Control Device Code: 027	
5. Potential Emissions:	<del>255.1</del> lb/hour      866 tons/year 318.9
6. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year 0.30	
8. Emission Factor: <del>0.24</del> lb/MM BTU* 0.20 lb/MM BTU** Reference: <del>Permit PA-88-24A, PSD-FL-137A</del>	
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5	
10. Calculation of Emissions:  <b>See attached calculations at end of Boiler Section.</b>	
11. Pollutant Potential/Estimated Emissions Comment:  <b>Limited by PSD-FL-137A.</b> * 3-hour rolling average ** <del>12-month rolling average</del> 30-day rolling average.	

**Emissions Unit Information Section 9 of 34**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See comment.</b>		
4. Equivalent Allowable Emissions:	<del>255</del> lb/hour 318.9	866 tons/year
5. Method of Compliance: <b>Continuous Emissions Monitoring Method 6,6c or 8 and Method 19</b> <span style="margin-left: 400px;">^</span> <span style="margin-left: 400px;">and</span>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):  <b><del>Permit PA-88-24A</del></b> <b><del>PSD-FL-137A</del></b> 3-hour rolling average for SO <sub>2</sub> = <sup>0.30</sup> <del>0.24</del> lb/MMBtu <del>12-month</del> rolling average for SO <sub>2</sub> = 0.20 lb/MMBtu <del>30-day</del>		

**Emissions Unit Information Section 9 of 34**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See Comment.</b>		
4. Equivalent Allowable Emissions:	<b>186 lb/hour</b>	<b>758 tons/year</b>
5. Method of Compliance: <b>Continuous Emissions Monitoring and Method 10</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		
<p><b>PSD-FL-137A</b> <span style="float: right;">186 lb/hr</span> <b>8-hr rolling average for CO = 0.175 lbs/MMBtu</b> <sup>except for initial and annual compliance tests and the CEM certification, when the 1-hour applies</sup> 12-month rolling average for CO = 758 ton/year</p>		

See PSD-FL-137, Specific Condition 11.A.9.e. for alternative CO emission limits during specific operating modes.

**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

**Pollutant Potential/Estimated Emissions:** Pollutant 1 of 12

1. Pollutant Emitted: SO <sub>2</sub>	
2. Total Percent Efficiency of Control: (Qtrly. Report 4-1-94 to 4-26-96)	89 to 95 %
3. Primary Control Device Code: 041	
4. Secondary Control Device Code:	
5. Potential Emissions:	<del>255.1</del> lb/hour      866 tons/year 318.9
6. Synthetically Limited? [ X ] Yes      [ ] No	
7. Range of Estimated Fugitive/Other Emissions: [ ] 1      [ ] 2      [ ] 3      _____ to _____ tons/year 0.30	
8. Emission Factor: <del>0.24 lb/MM BTU hourly</del> * 0.20 lb/MM BTU <del>annually</del> ** Reference: <del>Permit PA-88-24A</del> , PSD-FL-137A	
9. Emissions Method Code: [ ] 1      [ ] 2      [ ] 3      [ ] 4      [ X ] 5	
10. Calculation of Emissions:  <b>See attached calculations at end of Boiler Section</b>	
11. Pollutant Potential/Estimated Emissions Comment:  <b>Limited by PSD-FL-137A.</b> * 3-hour rolling average ** 30-day rolling average	

**Emissions Unit Information Section 10 of 34**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See comment.</b>		
4. Equivalent Allowable Emissions:	<del>255</del> lb/hour 318.9	<b>866</b> tons/year
5. Method of Compliance: <b>Continuous Emissions Monitoring Method 6,6c or 8 and Method 19</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):  <del>Permit PA-88-24A</del> PSD-FL-137A 3-hour rolling average for SO <sub>2</sub> = <sup>0.30</sup> <b>0.24</b> lb/MMBtu <del>12-month</del> rolling average for SO <sub>2</sub> = <b>0.20</b> lb/MMBtu 30-day		



**Emissions Unit Information Section 10 of 34**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See Comment.</b>		
4. Equivalent Allowable Emissions:	<b>186 lb/hour</b>	<b>758 tons/year</b>
5. Method of Compliance: <b>Continuous Emissions Monitoring and Method 10</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		
<b>PSD-FL-137A</b> 8-hr rolling average for CO = 0.175 lbs/MMBtu, 186 lb/hr, except for initial and annual compliance tests and the CEM certification, when the 1-hour applies 12-month rolling average for CO = 758 ton/year		

*See PSD-FL-137, Specific Condition 11.A.9.e. For alternative CO emission limits during specific operating modes.*

**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

**Pollutant Potential/Estimated Emissions:** Pollutant 1 of 12

1. Pollutant Emitted: <b>SO<sub>2</sub></b>	
2. Total Percent Efficiency of Control: (Qtrly. Report 4-1 to 6-30-94)	<b>89 to 95 %</b>
3. Primary Control Device Code: <b>041</b>	
4. Secondary Control Device Code: <b>027</b>	
5. Potential Emissions:	<del>255.1</del> lb/hour <b>866 tons/year</b> 318.9
6. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year <b>0.30</b>	
8. Emission Factor: <del>0.24 lb/MM BTU hourly</del> * <b>0.20 lb/MM BTU annually</b> ** Reference: <del>Permit PA-88-24A, PSD-FL-137A</del>	
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5	
10. Calculation of Emissions:  <b>See attached calculations</b>	
11. Pollutant Potential/Estimated Emissions Comment:  <b>Limited by PSD-FL-137A.</b> * 3-hour rolling average ** 30-day rolling average	

Emissions Unit Information Section 11 of 34

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See comment.</b>		
4. Equivalent Allowable Emissions:	<del>255</del> lb/hour 318.9	866 tons/year
5. Method of Compliance: <b>Continuous Emissions Monitoring Method 6,6c or 8 and Method 19</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		
<p><del>Permit PA-88-24A</del>                  PSD-FL-137A                  3-hour rolling average for SO<sub>2</sub> = <sup>0.30</sup><del>0.24</del> lb/MMBtu  <del>12-month</del> rolling average for SO<sub>2</sub> = 0.20 lb/MMBtu                  30-day</p>		

**Emissions Unit Information Section 11 of 34**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>AMBIENT</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>See Comment.</b>		
4. Equivalent Allowable Emissions:	<b>186 lb/hour</b>	<b>758 tons/year</b>
5. Method of Compliance: <b>Continuous Emissions Monitoring and Method 10</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		
<b>PSD-FL-137A</b> 8-hr rolling average for CO = 0.175 lbs/MMBtu, 186 lb/hr, except for initial and annual compliance tests and the CEM certification, when the 1-hour applies 12-month rolling average for CO = 758 ton/year		

See PSD-FL-137, Specific Condition 11.A.9.e. for alternative CO limits during specific operating modes.

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

<b>E.U. ID No.</b>	<b>Brief Description</b>
-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)
-005	Absorber Dryer System Train - 2 (Dryer and Handling System)
-006	Coal Crusher Building
-007	Coal Silo Conveyor
-009, -025	ADS Storage Bins (1 & 2)
-010	Bed Ash Hopper
-011	Bed Ash Separator/Collector
-012, -026	Fly Ash Separators/Collectors (1 & 2)
-013	<del>Pelletizer Bed Ash Receiver Bin</del> Retired
-014	<del>Pelletizer Fly Ash Receiver Bin</del> Retired
-015	<del>Pellet Vibratory System</del> Retired
-016	<del>Pellet Recycle Tank</del> Retired
-017	<del>Pelletizing Recycle Hopper</del> Retired
-018	<del>Cured Pellet Screening Conveyor System</del> Retired
-019	<del>Pellet Recycle Conveyor</del> Retired
-020	Coal Car Unloading
-021	<del>Ash Pellet Hydrator</del> Retired
-022	<del>Ash Pellet Curing Silos</del> Retired
-023	<del>Ash Pelletizing Pans</del> Retired
-029	<del>Pellet Railcar Loadout</del> Retired
-030	Dry Ash Rail Car/Truck Loadout
-031	Pulverized Limestone Feeders (6)
-032	Bed Ash Silo Vent (for transfers to silo and emissions control for truck loadout)
-033	Fly Ash Silo Vent (for transfers to silo and emissions control for truck loadout)

*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.*

**Section III. Emissions Units and Conditions.**

**Subsection A. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
-001	Circulating Fluidized Bed Boiler A
-002	Circulating Fluidized Bed Boiler B
-003	Circulating Fluidized Bed Boiler C

Emissions unit numbers -001, -002, and -003 are Pyroflow® Circulating Fluidized Bed (CFB) dry bottom boilers designated as “CFB Boiler A”, “CFB Boiler B”, and “CFB Boiler C”, respectively. CFB Boilers A, B and C, are each rated at a maximum heat input of 1,063 million Btu per hour (MMBtu/hour) when firing crushed coal. Also, CFB Boilers B and C are each allowed to burn short fiber recycle rejects from the Stone Container Corporation (SCC) (was previously named Seminole Kraft Corporation (SKC)) recycling process. No. 2 fuel oil is used as an auxiliary fuel in all three boilers normally only for start-ups.

{Permitting notes. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). All three boilers began commercial operation January 25, 1994. Particulate matter emissions from each boiler are controlled by separate baghouses. NO<sub>x</sub> emissions from all units are controlled by selective non-catalytic reduction (SNCR). SO<sub>2</sub> emissions are controlled by limestone injection on the fluidized bed of each boiler. The three boilers share a common stack. Stack height = 403 feet, exit diameter = 13.26 feet, exit temperature = approx. 265 °F, actual volumetric flow rate = approx. 1,004,000 acfm.}

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**A.1. Permitted Capacity.** The maximum operation heat input rates to each CFB shall not exceed 110% of 1063 MMBtu/hr (1169 MMBtu/hr). Additionally, the facility shall not exceed a combined total of 3189 MMBtu/hr for all three units. The facility heat input limit shall be based upon the number of operating boilers at the facility. Specifically, the combined maximum heat input shall not exceed:  
1063 MMBtu/hr if only one boiler is operating,  
2126 MMBtu/hr if only two boilers are operating and  
3189 MMBtu if all three boilers are operating

<b>Unit No.</b>	<b>MMBtu/hr Heat Input</b>	<b>Fuel Type</b>
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**A.5. Emission Limits.** The maximum emission limits from each CFB boiler are:

Pollutant Name	Pollutant Acronym	lbs/MMBtu	lbs/hr	TPY
Carbon Monoxide	CO	0.175 <sup>1</sup>	186 <sup>1</sup>	758 <sup>4</sup>
Nitrogen Oxides	NO <sub>x</sub>	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1
Sulfur Dioxide	SO <sub>2</sub>	0.24 <sup>3</sup>	255.1 <sup>3</sup>	--
		0.30 <sup>3</sup>	318.9 <sup>3</sup>	
Volatile Organic Compound	VOC	0.20 <sup>4,2</sup>	--	866
		0.015	16.0	65
Particulate Matter	PM	0.018	19.1	78
Particulate Matter less than 10 microns	PM <sub>10</sub>	0.018	19.1	78
Sulfuric Acid mist	H <sub>2</sub> SO <sub>4</sub> mist	4.66x10 <sup>-4</sup>	0.50	2.0
Fluorides	Fl	7.44x10 <sup>-4</sup>	0.79	3.2
Lead	Pb	6.03x10 <sup>-5</sup>	0.06	0.26
Mercury	Hg	2.89x10 <sup>-5</sup>	0.03	0.13
Beryllium	Be	8.70x10 <sup>-6</sup>	0.01	0.04

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

Additional Notes:

1. Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour standard applies.
2. Thirty-day rolling average.
3. Three-hour rolling average.
4. Twelve-month rolling average.
5. See Appendix PSS-1, Protocol for Start-up and Shutdown, for alternative CO emission limits during specific operating modes

[PSD-FL-137(A)]

**A.6. Visible Emissions.** Visible emissions (VE) shall not exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour when VE shall not exceed 27% opacity. Because CFB Boilers A, B & C share a common stack, visible emissions violations from the stack will be attributed to all three units unless opacity meter results show the specific unit causing the violation.

[40 CFR 60.42a(b); and, PSD-FL-137(A)]

**A.7. Sulfur Dioxide - Sulfur Content.**

1. Coal. In order to ensure continuous compliance with the SO<sub>2</sub> limit stated in specific condition A.5., the coal sulfur content shall not exceed 1.7 percent, by weight, on a shipment (train load) basis and 1.2 percent, by weight, on an annual basis, as measured by applicable test methods (see specific condition A.36.).
2. No. 2 Fuel Oil. The No. 2 fuel oil sulfur content shall not exceed 0.05 percent, by weight, as measured by applicable test methods (see specific condition A.36.).

[PSD-FL-137(A)]

**A.31. Renewal Tests Required.** Compliance tests shall be performed for VOCs, Fl, NH<sub>3</sub>, and H<sub>2</sub>SO<sub>4</sub> mist once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in specific conditions **A.5.** and **A.8.**  
 [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

**A.32. Additional Compliance Tests.** Compliance tests shall be performed for Hg, Be, and Pb until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in specific condition **A.5.** Such tests shall occur, as necessary, in the first, fifth, and tenth years and additional successive five year intervals following commercial operation.  
 [PA 88-24(A)]

**A.33.** The following test methods and procedures, or equivalent methods after obtaining prior written Department approval, shall be used for compliance testing:

<b>Purpose / Substance</b>	<b>Test Methods</b>
Selection of sample site and sample traverses	EPA Method 1
Determining stack gas flow rate	EPA Method 2
Gas analysis for calculation of percent O <sub>2</sub> and CO <sub>2</sub>	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf)	EPA Method 4
PM	EPA Method 5- <del>or</del> , 17, or 29
SO <sub>2</sub>	EPA Method 6, 6B, 6C, or 8
NO <sub>x</sub>	EPA Method 7, 7A, 7C, 7D, or 7E
H <sub>2</sub> SO <sub>4</sub> mist	EPA Method 8
VE	EPA Method 9
CO	EPA Method 10
Pb	EPA Method 12 or 29
Fl	EPA Method 13A or 13B
SO <sub>2</sub> removal efficiency	EPA Method 19
VOCs	EPA Method 18 or 25
Hg	EPA Method 101A or 29
Be	EPA Method 104 or 29
PM <sub>10</sub>	EPA Method 201 or 201A
NH <sub>3</sub>	EPA Conditional Method 27

[Rules 62-213.440, and 62-297.401, F.A.C.; 40 CFR 60 and 61; PSD-FL-137 (A); initial Title V permit application received 6/14/96; and, applicant request in Title V Draft Permit Comments received 02/12/99]



**A.62.** Fuel shall not be burned in any CFB boiler unless the control devices are operating properly pursuant to 40 CFR 60, Subpart Da.  
[PSD-FL-137(A)]

**A.63. Mercury Control.** CFB technology and baghouses (see specific condition A.10.) shall be used for control of Hg to comply with the emission limitations of specific condition A.5. No additional control shall be required, at this time, as long as the compliance tests required in specific condition A.32. demonstrate that the emission limitation is being met.  
[Rule 62-213.440, F.A.C.; and, letter from Hamilton S. Oven dated April 6, 1995.]

**A.64. Recycle Rejects Test Burn.** To the extent that it is consistent with A.3., A.5., and A.6., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998, by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, and the following, CBCP may burn all or a portion of the short fiber rejects generated by SKC in processing recycled paper. Prior to burning the rejects as a supplemental fuel however, CBCP shall conduct a test burn to determine the effects of burning the rejects. At least (90) days prior to any proposed test burn, CBCP shall submit a plan to the Department for conducting a 30-day test burn designed to ascertain whether the CFB's can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in A.3., A.4., and A.6., and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFB's and without violating any other environmental requirements. CBCP shall notify the Department and the Regulatory and Environmental Services Department (RESD) at least (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. The permittee shall submit a plan to the Department for conducting a 30-day test burn. That test burn shall be designed to ascertain whether the CFB boilers can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in specific conditions A.3., A.5., and A.6. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFB boilers and without violating any other environmental requirements. Before burning any recycle rejects, CBCP shall re-evaluate the test burn plan that was submitted to the Department in November of 1993. If it is still valid, the permittee shall notify the Department and the (AWQD) at least thirty (30) days prior to initiation of the test burn. If the previously submitted plan is not still valid, a new plan shall be submitted at least 90 days prior to conducting a test burn. The results of the test burn and the permittee's analysis shall be reported to the Department and to AWQD within forty five (45) days of completion of the test burn. The Department shall notify the permittee within thirty (30) days thereafter of its approval or disapproval of any conclusion by the permittee that the test burn demonstrated that the rejects can be burned in compliance with this condition.  
[PSD-FL-137(A)]

**Subsection B. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description:</b>
	<b>Material Handling Systems and Treatment Operations</b>
-004	Absorber Dryer System Train - 1 (Dryer and Handling System)
-005	Absorber Dryer System Train - 2 (Dryer and Handling System)
-009, -025	ADS Storage Bins (1 & 2)
-010	Bed Ash Hopper
-011	Bed Ash Separator/Collector
-012, -026	Fly Ash Separators/Collectors (1 & 2)
-013	<del>Pelletizer Bed Ash Receiver Bin</del>
-014	<del>Pelletizer Fly Ash Receiver Bin</del>
-015	<del>Pellet Vibratory System</del>
-016	<del>Pellet Recycle Tank</del>
-017	<del>Pelletizing Recycle Hopper</del>
-018	<del>Cured Pellet Screening Conveyor System</del>
-019	<del>Pellet Recycle Conveyor</del>
-021	<del>Ash Pellet Hydrator</del>
-022	<del>Ash Pellet Curing Silos</del>
-023	<del>Ash Pelletizing Pans</del>
-029	<del>Pellet Railcar Loadout</del>
-030	<del>Dry Ash Rail Car/Truck Loadout</del>
-031	<del>Pulverized Limestone Feeders (6)</del>
-032	<del>Bed Ash Silo Vent (for transfers to silo and emissions control for truck loadout)</del>
-033	<del>Fly Ash Silo Vent (for transfers to silo and emissions control for truck loadout)</del>

These emissions units are associated with the material handling and treatment operations for limestone and ash. Limestone delivered to the facility is stored in an open pile. The limestone is transferred by a front end loader from the pile to a reclaim hopper. An enclosed feeder directs the limestone into the Absorber Dryer System (ADS) trains. One ADS train, of which there are two identical trains (ADS-1 & ADS-2), consists of: a No. 2 fuel oil-fired dryer, a limestone crusher, a limestone cyclone classifier, a limestone screener, and a limestone vibrating pan conveyor. Each ADS train operates at a throughput rate of 49,000 acfm. Pulverized limestone product is directed by rotary feeder to two ADS storage bins (ADS Storage Bin 1 and ADS Storage Bin 2). The pulverized limestone is transferred to the CFB boilers by 6 feeders. ADS Storage Bin-1 supplies CFB boilers A and B through 3 feeders at a throughput rate of 6,840 acfm and ADS Storage Bin-2 feeds CFB Boiler C through 3 feeders at a throughput rate of 6,993 acfm.

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 sealed 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 sealed dry bulk trailer trucks from these silos. ~~Ash pelletizing refers to all operations necessary for ash pelletization that are not also necessary for dry ash loadout. For this system, bed ash and fly ash are each transferred from the dry ash loadout silos to bed ash and fly ash receivers. The bed ash discharges into a weigh hopper connected to a hydrator mixer. The hydrated bed ash and untreated fly ash from the receiver are combined and directed to two ash pan pelletizers and the resulting product is transferred to two pellet curing silos. The ash pellets are sent through two hoppers connected to two pellet screens. Pellets with insufficient particle size pass through the screen and are recycled through the pelletizing system. The remaining pellets are sent to hoppers that discharge into rail cars. Pellet screen overflow is directed to a temporary rail loading station.~~

{Permitting note(s): These emissions units are regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration and, permittee requested limitations established in PSD-FL-137(A, B & C). In addition, the limestone handling/treatment emission units are regulated under NSPS - 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Particulate matter and visible emissions from the material handling units/operations listed in the table above are controlled by either a fabric filter or a baghouse system, ~~except for the ash pellet hydrator, ash pellet curing silos, and ash pelletizing pan, which are controlled by a scrubber system.~~ Fugitive emissions from the dry ash rail car/truck loadout operation shall be controlled by using closed or covered containers under negative air pressures during ash loadout; and by using water sprays prior to removal of the rail car loadout cap when loading open rail cars. Information regarding flow conditions is as follows:

<u>E.U. ID No.</u>	<u>Brief Description: Material Handling Systems and Treatment Operations</u>	<u>Stack Height (ft)</u>	<u>Exit Diameter (ft)</u>	<u>Exit Temp. (°F)</u>	<u>Actual Volumetric Flow Rate (acfm)</u>
-004,	Absorber Dryer System Train - 1	63	4.17	195	49,000
-005,	Absorber Dryer System Train - 2	63	4.17	195	49,000
-021	Ash Pellet Hydrator	110	2.13	95.7	15,900
-023	Ash Pelletizing Pan	30	2.23	90	14,740

<u>E.U. ID No.</u>	<u>Brief Description: Material Handling Systems and Treatment Operations</u>	<u>Nonstack Emission Point Height (ft)</u>	<u>Exit Temp. (°F)</u>	<u>Actual Volumetric Flow Rate (acfm)</u>	<u>Maximum Process or Through-put Rate (acfm)</u>
-009	ADS Storage Bin - 1	90	102	6,840	6,840
-025	ADS Storage Bin - 2	90	89	6,993	6,993
-010	Bed Ash Hopper	125	96	N/A	670
-011	Bed Ash Separator/Collector	104	223	N/A	5,345
-013	<del>Pelletizer Bed Ash Receiver Bin</del>	125	101	N/A	4,000
-014	<del>Pelletizer Fly Ash Receiver Bin</del>	128	119	N/A	4,625
-012	Fly Ash Separator/Collector - 1	138	197	N/A	5,974
-026	Fly Ash Separator/Collector - 2	138	200	N/A	6,074
-027	Bed Ash Receiver	N/A	N/A	N/A	N/A
-028	Fly Ash Receiver	N/A	N/A	N/A	N/A
-015	<del>Pellet Vibratory System</del>	25	104	N/A	15,000
-016	<del>Pellet Recycle Tank</del>	120	70	N/A	1,100
-017	<del>Pelletizing Recycle Hopper</del>	115	89	N/A	754
-018	Cured Pellet Screening Conveyor System	15	99	N/A	2,100
-019	<del>Pellet Recycle Conveyor</del>	15	N/A	N/A	1,562
-029	<del>Pelletizing Rail Loadout</del>	40	85	N/A	4,500
-030	Dry Ash Rail Car/Truck Loadout	N/A	120	6,000	20,000
-022	Ash Pellet Curing Silos	85	98	N/A	6,531
-031	Pulverized Limestone Feeders (6)	50	77	N/A	365
-032	Bed Ash Silo Vent	104	80	N/A	1,800
-033	Fly Ash Silo Vent	138	127	N/A	3,700

End of Permitting Notes.}

The following specific conditions apply to the emissions unit(s) listed above:

**Essential Potential to Emit (PTE) Parameters**

**B.1. Permitted Capacity.**

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

<b>Material Handled</b>	<b>Tons/Month<sup>1</sup></b>	<b>TPY</b>
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

<sup>1</sup> Based on 30 consecutive days.

- b. 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.

[PSD-FL-137(A & C)]

**B.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **B.19.**

[Rule 62-297.310(2), F.A.C.]

**B.3. Hours of Operation.**

- a. The ADS-1 and ADS-2 trains may be operated in any combination for a maximum combined total of 22 hours per day (not to exceed 8,030 combined hrs/yr) at maximum capacity.
- b. Except for the ADS-1 and ADS-2 trains, the rest of the material handling operations may operate continuously, i.e., 8,760 hrs/yr.

[PSD-FL-137(A & C)]

**B.4. Methods of Operation.**

a. Fuel. The ADS-1 and ADS-2 dryers are permitted to fire only No. 2 fuel oil. The maximum firing rate of No. 2 fuel oil for each ADS dryer shall not exceed 120 gals/hr nor 350,400 gals/yr. This reflects a combined total fuel oil firing rate of 240 gals/hr and 700,800 gals/yr, for the two ADS trains. See specific conditions **B.7.** and **B.17.**

b. Ash Handling.

1. Bed ash and fly ash may be directly removed (as dry ash) from plant property.
- ~~2. Bed ash and fly ash may be routed to a pelletizing system prior to removal from plant property.~~
- ~~3. The dry ash loadout system and the ash pelletizer system shall not be operated simultaneously.~~
4. The dry ash ~~and pelletized ash~~ shall be loaded only onto rail cars or sealed trucks for removal. Removal of bottom and fly ash from the CBCF site by any means other than by rail or sealed trucks shall require the prior approval of the Department and AWQD of the method of fugitive emissions control.
5. The dry ash ~~and pelletized ash~~ may be loaded onto open or closed rail cars.

[a.: PSD-FL-137(A); b.: PSD-FL-137(C) and applicant request in letter received March 5, 1999]

**Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. For limestone handling/treatment emission units, meeting the PSD limits assures compliance with the NSPS limits.}

**B.5. Particulate Matter Emissions.**

- ~~a. Except for the ash pellet hydrator, ash pellet curing silos and ash pelletizing pan, particulate matter emissions from the emissions units in this subsection shall not exceed 0.003 gr/dscf.~~
- ~~b. Particulate matter emissions from the ash pellet hydrator, ash pellet curing silos and ash pelletizing pan shall not exceed 0.01 gr/dscf.~~

[PSD-FL-137(A, B & C)]

**B.6. Visible Emissions.** Visible emissions from the emissions units in this subsection shall not exceed 5% opacity.

[PSD-FL-137(A, B & C)]

**B.7. No. 2 Fuel Oil Sulfur Content.** The maximum No. 2 fuel oil sulfur content shall not exceed 0.05%, by weight. See specific conditions **B.4.** and **B.17.**

[PSD-FL-137(A)]

### **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

**B.8.** Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

**B.9.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

### **Emission Controls**

**B.10. Control Systems.**

- a. Particulate Matter and Visible Emissions. For the above referenced material handling emissions units/operations, the control systems shall be either a fabric filter or baghouse system, ~~except for the ash pellet hydrator, ash pellet curing silos, and ash pelletizing pan.~~
- b. ~~Particulate Matter and Visible Emissions. For the ash pellet hydrator, ash pellet curing silos and ash pelletizing pan, the control system shall be a scrubber.~~
- c. Fugitive Particulate Matter and Visible Emissions. For dry ash rail car loadout, fugitive emissions shall be controlled by loading under negative pressure into either closed containers or open containers fitted with a rail car loadout cap; and, by using water sprays to create a crust on the top layer prior to removal of the rail car loadout cap when loading open rail cars.

[PSD-FL-137(A, B & C)]

### **Monitoring of Operations**

#### **B.11. Determination of Process Variables.**

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

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

### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. }

**B.12. Annual Tests Required.** Annual visible emissions compliance tests shall be performed for all emissions units in this subsection. ~~Annual particulate matter emissions compliance tests shall be performed for the following units: ash pellet hydrator, ash pellet curing silos, and ash pelletizing pan.~~

[Rule 62-297.310(7), F.A.C. ; and, PSD FL-137(A)]

**B.13. Visible Emissions.** The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C.

[PSD-FL-137(A)]

#### **B.14. Particulate Matter Emissions.**

- a. ~~Except for the ash pellet hydrator, ash pellet curing silos and ash pelletizing pan,~~ the test method for particulate matter emissions shall be EPA Method 5 or 17, incorporated in Chapter 62-297, F.A.C.
- b. ~~The test method for particulate matter emissions from the ash pellet hydrator, ash pellet curing silos and ash pelletizing pan shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.~~

[PSD-FL-137(A & C)]

**B.15.** Subsequent to the initial particulate matter mass emissions test that was required by PSD-FL-137(A, B, & C), neither the Department nor the AWQD shall require a particulate matter mass emissions test unless the visible emissions limit of 5% opacity is exceeded for a given emissions unit, or unless the Department or the AWQD, based on other information, has reason to believe that the particulate matter emissions limit is being violated. This provision applies only to those sources equipped with a baghouse.

[Rule 62-297.620(4), F.A.C.; and, PSD-FL-137(A, B & C)]

## Appendix PSS-1

For the specific periods defined below, the emission limits of Carbon Monoxide (CO) shall be as follows:

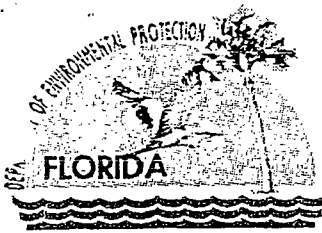
Warm startup - emissions up to 186 lb/hr (no lb/MMBtu limit) with sufficient documentation

Cold startup - up to 10 hours (per cold startup) of CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

Refractory Curing - Must notify agency at least 24 hours prior to commencing; CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

The CO emissions limit of 758 TPY per boiler via 12-month rolling average is inclusive of all periods of operation including those noted above.





# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

March 9, 2000

Mr. Jeffrey Walker  
Environmental Manager  
Cedar Bay Generating Company, L.P.  
P.O. Box 26324  
Jacksonville, Florida 32226

Re: DEP File No. PA 88-24; Modification of Permit No. PSD-FL-137  
Cedar Bay Generating Plant / Duval County

Dear Mr. Walker:

The applicant, Cedar Bay Generating Company, L.P., applied on March 22, 1999, to the Department for a modification to PSD permit number PSD-FL-137 for its Cedar Bay Generating Plant located in Duval County. The modification is to allow the three fluidized bed circulating boilers (A, B and C) to operate with changes to their method of compliance for startup and shutdown, SO<sub>2</sub> emissions, mercury testing, heat input and stack testing methodology. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

**Specific Condition No. II.A.3:**

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

Pollutant	Emission Limitations		TPY	TPY for 3 CFBs
	lbs/MMBtu	lbs/hr.		
CO <sub>2</sub>	0.175 <sup>1</sup>	186 <sup>1</sup>	<del>758</del> 758 <sup>4</sup>	2273
NCx	0.17 <sup>2</sup>	180.7 <sup>2</sup>	736.1	2208
SO <sub>2</sub>	0.24 <sup>3</sup> 0.30 <sup>3</sup>	255.1 <sup>3</sup> 318.9 <sup>3</sup>	--	--
	<del>0.20<sup>4</sup></del> 0.20 <sup>2</sup>	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM <sub>10</sub>	0.018	19.1	78	234
H <sub>2</sub> SO <sub>4</sub> mist	4.66 x 10 <sup>-4</sup>	0.50	2.0	6.1
Fluorides	7.44 x 10 <sup>-4</sup>	0.79	3.2	9.7
Lead	6.03 x 10 <sup>-5</sup>	0.06	0.26	0.78
Mercury	2.89 x 10 <sup>-5</sup>	0.03	0.13	0.38
Beryllium	8.70 x 10 <sup>-6</sup>	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.
- 5 See Specific Condition II.A.9.e. for alternative CO emission limits during specific operating modes.

"More Protection, Less Process"

Printed on recycled paper.

Specific Condition No. II.A.1.c.:

- c. The maximum heat input to each CFB shall not exceed 110% of 1063 MMBtu/hr (1169 MMBtu/hr). Additionally, the facility shall not exceed This reflects a combined total of 3189 MMBtu/hr. for all three units. The facility heat input limit shall be based upon the number of operating boilers at the facility. Specifically, the combined maximum heat input shall not exceed:  
1063 MMBtu/hr if only one boiler is operating.  
2126 MMBtu/hr if only two boilers are operating and  
3189 MMBtu/hr if all three boilers are operating.

{Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

Specific Condition No. II.A.1.h.:

h. To the extent that it is consistent with Specific Condition No. II.A.1.b., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998, by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, L.P., and the following, CBCP shall may burn all or a portion of the short fiber rejects generated by SKC in processing recycled paper. Prior to burning the rejects as a supplemental fuel however, CBCP shall conduct a test burn to determine the effects of burning the rejects. No less than At least ninety (90) days prior to completion of construction any proposed test burn, 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 (RES D) 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 RES D 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.

Specific Condition No. II.A.2.c.:

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, RES D and EPR, 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. Mercury testing shall not be routinely required. However, should the Department have reason to believe that a change in mercury emissions has occurred (e.g. via a change in fuel quality, particulate removal equipment, etc.) mercury testing shall be required.

Specific Condition No. II.A.8.e.:

- 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:
- (5) Method 29, Method 5 or Method 17 for particulate matter.
  - (11) Method 29, Method 12 for lead.
  - (15) Method 29, Method 101A for mercury.
  - (16) Method 29, Method 104 for beryllium.

Specific Condition No. II.A.9.e.:

- 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 with the following exceptions. For the specific periods defined below, the emission limits of Carbon Monoxide (CO) shall be as follows:

Warm startup – emissions up to 186 lb/hr (no lb/MMBtu limit) with sufficient documentation

Cold startup – up to 10 hours (per cold startup) of CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

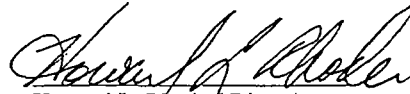
Refractory Curing – Must notify agency at least 24 hours prior to commencing: CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

The CO emissions limit of 758 TPY per boiler via 12-month rolling average is inclusive of all periods of operation including those noted above.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director  
Division of Air Resources  
Management

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 3-9-00 to the person(s) listed:

J. A. Walker, Cedar Bay Cogenerating Company, L.P. \*  
Hamilton S. Oven, P.E.  
James L. Manning, P.E., RESD  
Doug Neeley, EPA  
John Bunyak, NPS  
Chris Kirts, DEP-NED

Clerk Stamp

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

Kimi Jober  
(Clerk)

3-9-00  
(Date)