

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

July 8, 2004

Martin Kreft
General Manager
Cedar Bay Generating Company, L.P.
9640 Eastport Road
Jacksonville, Florida 32226

Re: PROPOSED Title V Permit No.: 0310337-007-AV
Cedar Bay Generating Plant

Dear Mr. Kreft:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Cedar Bay Generating Plant located at 9640 Eastport Road, Jacksonville, Duval County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The document may be reviewed by entering the seven-digit facility ID at the following web site address:
<http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp>

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Michael P. Halpin, P.E. at 850/488-1344.

Sincerely,

Trina Vielhauer
Chief
Bureau of Air Regulation

TV/JKP/mph

Enclosures

copy furnished to:
George Lipka, P.E. Earth Tech
Jeff Walker, Environmental Manager
Hamilton Oven, DEP-Siting
Christ Kirts, NED
James Manning, RESD
USEPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

Printed on recycled paper.

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 0310337-007-AV

Page 1 of 1

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Cedar Bay Generating Company, L.P. for the Cedar Bay Generating Plant located at 9640 Eastport Road, Jacksonville, Duval County was clerked on May 13, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Florida Times Union on May 22, 2004. The DRAFT Title V Air Operation Permit was available for public inspection at the Northeast District Office in Jacksonville. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on June 2, 2004.

II. Public Comment(s).

No comments were received during the 30 (thirty) day public comment period. Since no comments were received, the DRAFT Title V Air Operation Permit becomes the PROPOSED Title V Air Operation Permit.

III. Conclusion.

Since there were no comments received during the Public Notice period, no changes were made to the DRAFT Title V Permit and the permitting authority hereby issues the PROPOSED Permit No. 0310337-007-AV.

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

7000 1670 0013 3110 2974

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To
Mr. Martin Kreft
 Street, Apt. No., or PO Box No.
9640 Eastport Road
 City, State, ZIP+4
Jacksonville, Florida 32226

PS Form 3800, May 2000

See Reverse for Instructions

SEND

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Martin Kreft
 General Manager
 Cedar Bay Generating Company,
 L.P.
 9640 Eastport Road
 Jacksonville, Florida 32226

2. Article Number

(Transfer from service label)

7000 1670 0013 3110 2974

A. Signature

Shelly Froelich Agent Addressee

B. Received by (Printed Name)

Shelly Froelich Date of Delivery

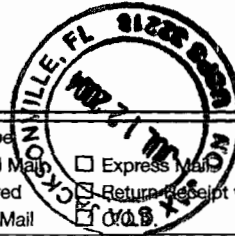
D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail O.D.S.

4. Restricted Delivery? (Extra Fee)

Yes



STATEMENT OF BASIS

Cedar Bay Generating Company, L.P.

Cedar Bay Cogeneration Facility

Facility ID No.: 0310337

Duval County

Title V Air Operation Permit Renewal

PROPOSED Permit Project No.: 0310337-007-AV

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The subject of this permit is for the renewal of Title V Air Operation Permit.

This facility consists of three circulating fluidized bed steam generators (boilers) designated as Boilers A, B, and C, a coal handling area, a limestone handling area, and an ash handling area. Crushed coal is the primary fuel for Boilers A, B and C with approval for limited co-firing of petroleum coke. The fuel for Boilers B and C can also be supplemented with short fiber recycle rejects received from Stone Container Corporation. No. 2 fuel oil is used as supplemental fuel in all three boilers normally only for start-ups. CAM does apply.

All three boilers began commercial operation January 25, 1994. Particulate matter emissions from each boiler are controlled by separate baghouses. NO_x emissions from all units are controlled by selective non-catalytic reduction (SNCR). SO₂ emissions are controlled by limestone injection on the fluidized bed of each boiler. The three boilers share a common stack.

In 2002, Cedar Bay received approval to co-fire petroleum coke (pet coke) in each CFB boiler via permit number 0310337-005-AC. The conditions of the approval have been added to this Title V permit as follows:

- 1) Pet coke may be utilized as a co-firing fuel, and shall not exceed 35 % fuel input by weight on a daily basis.
- 2) When co-firing coal and petcoke, the blended fuel input to the CFBs shall not exceed 3.2 lb/MMBtu equivalent SO₂ content (determined on a monthly basis via a composite of daily fuel samples).

The permit additionally includes updates and corrections to material handling process descriptions plant-wide, including:

- 1) Addition of a pug mill for ash conditioning.
- 2) Clarification that dry ash is not loaded out by truck and that Wet Ash Truck Loadout will use a pug mill to condition the ash with a water source to allow the loading of wet ash into open top trailers.
- 3) Updates to limestone/aragonite and ash handling requirements to reflect co-firing of pet coke.
- 4) Removal of an insignificant activity (49. Recycle surge hopper baghouse was related to the removed pelletizer).
- 5) Corrections to typographical errors.

Note that the January 2002 revision to the Title V permit addressed the removal of several pieces of equipment related to the old ash pelletizer system.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received January 12, 2004, this facility is a major source of hazardous air pollutants (HAPs).

Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility
Facility ID No.: 0310337
Duval County

Title V Air Operation Permit Renewal
PROPOSED Permit No.: 0310337-007-AV

Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:

City of Jacksonville
Regulatory and Environmental Services Department
Air and Water Quality Division
117 W. Duval Street, Suite 225
Jacksonville, Florida 32202-3718
Telephone: 904/630-3484
Fax: 904/630-3638

Title V Air Operation Permit Renewal

PROPOSED Permit No.: 0310337-007-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
Title V Air Operation Permit Placard Page.	1
I. Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Unit ID Numbers and Brief Descriptions.	2
C. Relevant Documents.	3
II. Facility-wide Conditions.	4
III. Emissions Units and Conditions.	
A. CFB Boilers A, B and C.	8
B. Material Handling.	28
C. Coal Handling.	37
Referenced Attachments.	44
Appendix 40 CFR 60, Subpart A	
Appendix A-1, Abbreviations, Definitions, Citations, and Identification Numbers	
Appendix PSS-1, Protocol for Start-up and Shutdown	
Appendix JEPB Rule 2	
Appendix CAM	
Appendix H-1, Permit History / ID Number Transfers	
Appendix I-1, List of Insignificant Emissions Units and/or Activities	
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)	
Appendix TV-2, Title V Conditions (version dated 11/10/98)	
Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60)	
Table 297.310-1, Calibration Schedule	
Table 1-1, Summary of Air Pollutant Standards and Terms	
Table 2-1, Compliance Requirements	

Permittee:

Cedar Bay Generating Company, L.P.
9640 Eastport Road
Jacksonville, Florida 32226

FINAL Permit No.: 0310337-007-AV**Facility ID No.:** 0310337**SIC Nos.:** 49, 4911**Project:** Title V Air Operation Permit Renewal

This permit is to renew the Title V Air Operation Permit and incorporate construction permits issued on 11/08/01, 03/12/02 and 12/20/02 for Cedar Bay Cogeneration Facility (CBCF) located at 9640 Eastport Road, Jacksonville, Duval County. UTM Coordinates: Zone 17, 441.08 km East and 3365.06 km North; Latitude: 30° 25' 21" North and Longitude: 81° 36' 23" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213.; the City of Jacksonville Ordinance Code (JOC), Title X, Chapter 376; and, the Jacksonville Environmental Protection Board (JEPB) Rule 2, Parts I thru VII and Parts IX thru XII. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix 40 CFR 60, Subpart A

Appendix PSS-1, Protocol for Start-up and Shutdown

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-4, Title V Conditions (version dated 2/12/02)

Appendix JEPB Rule 2

Appendix CAM

Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring
System Performance (40 CFR 60)

Table 297.310-1, Calibration Schedule

Effective Date: 09/14/2004**Renewal Application Due Date:** 01/14/2009**Expiration Date:** 09/13/2009

Michael G. Cooke, Director,
Division of Air Resources Management

MGC/jkp/mph

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of three circulating fluidized bed steam generators (boilers) designated as Boilers A, B, and C, a coal handling area, a limestone handling area, and an ash handling area. Crushed coal is the primary fuel for Boilers A, B and C with approval for limited co-firing of petroleum coke. The fuel for Boilers B and C can also be supplemented with short fiber recycle rejects received from Stone Container Corporation. No. 2 fuel oil is used as supplemental fuel in all three boilers normally only for start-ups. Also included in this permit are miscellaneous insignificant emissions units and/or activities.

Based on the initial Title V renewal permit application received January 12, 2004, this facility is a major source of hazardous air pollutants (HAPs).

The use of 'Permitting Notes' throughout this permit are for informational purposes, only, and are not permit conditions.

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

E.U. ID No.	Brief Description
-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)
-030	Dry Ash Rail Car
-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.

Subsection C. Relevant Documents.

The following documents are part of this permit:

Appendix 40 CFR 60, Subpart A
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)
Appendix TV-4, Title V Conditions (version dated 2/12/02)
Appendix JEPB Rule 2
Appendix CAM
Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring
System Performance (40 CFR 60)
Table 297.310-1, Calibration Schedule

{Permitting Note: The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.}

These documents are provided to the permittee for informational purposes:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)
Appendix H-1, Permit History
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:

Initial Title V Permit Issued/Effective July 14, 1999
PSD Permit No. PSD-FL-137D issued March 9, 2000
Title V Permit Revision Application Received March 15, 2001
Title V Permit Revision Additional Information Received June 7, 2001
PSD Permit No. PSD-FL-137E issued November 8, 2001
Construction Permits issued March 12, 2002 and December 20, 2002
Title V Permit Renewal Application Received January 12, 2004

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-4, Title V Conditions, is a part of this permit.

{Permitting note: Appendix TV-4, Title V Conditions is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate. If desired, a copy of Appendix TV-4, Title V Conditions can be downloaded from the Division of Air Resources Management's Internet Web site located at the following address:

<http://www.dep.state.fl.us/air/eproducts/airpermit/Airsearch.asp>}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(2), F.A.C.]

3. **Not federally enforceable.** Odor Nuisance. Pursuant to Jacksonville Ordinance Code (JOC) Chapter 376, any facility that causes or contributes to the emission of objectionable odors which results in the City of Jacksonville Air and Water Quality Division (AWQD) receiving and validating complaints from five (5) or more different households within a 90 day period and can be cited for objectionable odors.

[JOC Chapter 376]

4. Prevention of Accidental Releases (Section 112(r) of CAA).

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

- a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
- b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
- c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

{Permitting Note: No unregulated emissions units and/or activities have been identified as of issuance date of this permit}

6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

[Rule 62-296.320(1)(a), F.A.C.]

7. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a) Unconfined PM related to coal transfer points is controlled by water spray in key locations as necessary.
- b) Unconfined PM related to coal, limestone (aragonite) and ash mobile equipment operations is controlled by wetting the coal pile and road surfaces.

[Rule 62-296.320(4)(c)2., F.A.C.; and, Proposed by applicant in initial Title V renewal permit application received January 12, 2004.]

{Permitting Note: This condition presents the reasonable precautions to be implemented in accordance with Rule 62-296.320(4)(c), F.A.C., in lieu of the requirements of Condition No. 57 of Appendix TV-4.}

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]

10. Not federally enforceable. Appendix JEPB Rule 2 is incorporated by reference. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIII.

{Permitting note: This appendix provides the applicable rules of the City of Jacksonville Environmental Protection Board (JEPB) contained in Rule 2, Air Pollution Control, and the corresponding rules of the Department that have been adopted by reference and within the SOA (Specific Operating Agreement) signed with the Department.}

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

12. The permittee shall submit all compliance related notifications and reports required of this permit to the Regulatory and Environmental Services Department, Air and Water Quality Division (AWQD) office at the following address:

City of Jacksonville
Regulatory and Environmental Services Department
Air and Water Quality Division
117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Telephone: 904/630-4900
Fax: 904/630-3638

Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

13. Any reports, data, notifications, certifications, required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency, Region 4
Air, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303-8960
Phone: 404/562-9155
Fax: 404/562-9163 or 404/562-9164

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [Rule 62-213.420(4), F.A.C.]

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-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.

Compliance Assurance Monitoring (CAM) Requirements

These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

{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): Permit Nos. PSD-FL-137 (including revisions thereof); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C. All three boilers began commercial operation January 25, 1994. Particulate matter emissions from each boiler are controlled by separate baghouses. NO_x emissions from all units are controlled by selective non-catalytic reduction (SNCR). SO₂ 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 are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
-001	110% of 1063 (1169) 35% (by weight) 380	Coal Pet coke No. 2 Fuel Oil
-002	110% of 1063 (1169) 35% (by weight) 380	Coal Pet coke No. 2 Fuel Oil
-003	110% of 1063 (1169) 35% (by weight) 380	Coal Pet coke No. 2 Fuel Oil
Unit Nos.	MMBtu/yr Heat Input	Fuel Type
-001, -002 & -003	25.98 x 10 ⁶ (total - all 3 boilers)	all

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/hr, if all three boilers are operating.

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

{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.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.41**.

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

A.3. Methods of Operation.

(a) **Operating Scenarios - Steam Production.** CFB boilers A, B, and C are permitted to operate for the purpose of producing steam. The steam may be utilized as follows:

1. To drive a steam turbine generator for the purpose of producing electricity.
2. For production of electricity while diverting a portion of the steam to SCC.
3. To satisfy SCC's steam needs without producing electricity through a process called Full Flow Reheat Bypass (FFRB).

(b) **Fuels.**

1. **Coal.** 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. Petroleum coke (pet coke) may be utilized as a co-firing fuel, and shall not exceed 35 % fuel input

by weight on a daily basis. {Permitting Note: The limitations on the coal charging rate include both coal and pet coke.}

2. No. 2 Fuel Oil. Auxiliary fuel burners shall be fueled with only No. 2 fuel oil and shall normally only be used for start-ups. The maximum oil usage shall not exceed 8000 gals/hr and 1,900,000 gals/year.
 3. Other. Other fuels or wastes shall not be burned in the CFB boilers without prior specific written approval of the Secretary of the Department of Environmental Protection.
- (c) Short Fiber Rejects. The maximum charging rate to CFB Boilers B & C of short fiber recycle rejects from the SCC recycling process shall not exceed 210 yd³/day (wet) and 69,588 yd³/yr (wet). This reflects a combined total of 420 yd³/day (wet) and 139,176 yd³/yr (wet) for the two CFB boilers that fire recycle rejects. CFB Boiler A will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.

[PSD-FL-137(A), Title V permit application and 0310337-005-AC]

A.4. Hours of Operation. CFB Boilers A, B, and C may operate continuously, i.e. 8760 hours/year, each.

[PSD-FL-137(A)]

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 PM, VE, NO_x and SO₂, meeting the PSD limits assures compliance with the NSPS limits.}

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 ⁵	0.175 ¹	186 ¹	758 ⁴
Nitrogen Oxides	NO _x	0.17 ²	180.7 ²	736.1
Sulfur Dioxide	SO ₂	0.30 ³	318.9 ³	--
	SO ₂	0.20 ⁴	--	866
Volatile Organic Compound	VOC	0.015	16.0	65
Particulate Matter	PM	0.018	19.1	78
Particulate Matter less than 10 microns	PM ₁₀	0.018	19.1	78
Sulfuric Acid Mist	H ₂ SO ₄ mist	4.66x10 ⁻⁴	0.50	2.0
Fluorides	Fl	7.44x10 ⁻⁴	0.79	3.2
Lead	Pb	6.03x10 ⁻⁵	0.06	0.26
Mercury	Hg	2.89x10 ⁻⁵	0.03	0.13
Beryllium	Be	8.70x10 ⁻⁶	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 Specific Condition **A.13.b.** for alternative CO emission limits during specific operating modes.

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

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 SO₂ 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.**). When co-firing coal and petcoke, the blended fuel input to the CFBs shall not exceed 3.2 lb/MMBtu equivalent SO₂ content. Compliance shall be determined on a monthly basis via a composite of daily fuel samples.
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.8. Ammonia. Ammonia (NH₃) slip from exhaust gases shall not exceed 10 ppmvd when co-firing petcoke or burning coal at 100% capacity and 30 ppmvd when burning No. 2 fuel oil, as measured by applicable test methods (see Specific Condition **A.33.**).
[PSD-FL-137(A)]

Emission Controls

A.9. Sulfur Dioxide and Acid Gases. Limestone injection and fuel sulfur limitations shall be used for control of emissions of SO₂ and acid gases.
[PSD-FL-137(A)]

A.10. Particulate Matter. A baghouse shall be used for control of PM/PM₁₀ emissions.
[PSD-FL-137(A)]

A.11. Nitrogen Oxides. Selective Non-catalytic Reduction (SNCR) shall be used for control of NO_x emissions.
[PSD-FL-137(A)]

A.12. Carbon Monoxide and Volatile Organic Compounds. Good combustion characteristics, which are an inherent part of the CFB technology, shall be used for control of CO and VOC emissions.
[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.}

A.13.a. Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit 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.; and, PSD-FL-137(A)]

A.13.b. For the specific periods defined below, the emission limits of Carbon Monoxide (CO) shall be as follows:

1. Warm startup – emissions up to 186 lbs/hr (no lb/MMBtu limit) with sufficient documentation.
2. 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.
3. 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 a 12-month rolling average, is inclusive of all periods of operation, including those noted above.
[PSD-FL-137(D)]

A.14. 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.; and, PSD-FL-137(A)]

Compliance Provisions

A.15. Compliance with the particulate matter emission limitation under 40 CFR 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under 40 CFR 60.42a(a)(2) and (3).
[40 CFR 60.46a(a)]

A.16. Compliance with the nitrogen oxides emission limitation under 40 CFR 60.44a(a)(1) constitutes compliance with the percent reduction requirements under 40 CFR 60.44a(a)(2).
[40 CFR 60.46a(b)]

A.17. The particulate matter emission standards under 40 CFR 60.42a and the nitrogen oxide standards under 40 CFR 60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under 40 CFR 60.43a apply at all times except during periods of startup or shutdown.
[40 CFR 60.46a(c)]

A.18. If the owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR 60.47a, compliance of the affected facility with the emission requirements under 40 CFR 60.43a and 60.44a for the day on which the 30-day period ends may be determined by the Administrator following the applicable procedures in section 7 of Method 19.
[40 CFR 60.46a(h)]

Monitoring of Operations

A.19. Determination of Process Variables.

- (a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (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.]

A.20. Devices shall have been installed and shall be maintained in order to continuously monitor and record steam production and flue gas temperature at the exit of the control equipment.
[PSD-FL-137(A)]

A.21. Continuous Monitors. The Permittee shall have installed, certified and calibrated, and shall operate and maintain continuous emissions monitoring systems (CEMS) for opacity, SO₂, NO_x, CO, and oxygen (O₂) or carbon dioxide (CO₂). These CEMS shall be used to determine compliance with the emission limitations in Specific Condition A.5. for CO, NO_x, and SO₂, and with the opacity requirements in Specific Condition A.6. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span CEMS for SO₂ and NO_x providing certification tests and calibrations are performed for each span. Each of the CEMS for SO₂ and NO_x 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 Department, in writing, and in accordance with state and federal regulations.

[40 CFR 60.47a(a), (b), (c) & (d); and, PSD-FL-137(A)]

A.22. The continuous monitoring systems shall be operated and data recorded during all periods of operation at the affected facility including periods of startup, shutdown, malfunction, or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR 60.47a(e)]

A.23. The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.47a(h).

[40 CFR 60.47a(f)]

A.24. The 1-hour averages required under 40 CFR 60.13(h) are expressed in ng/J (lb/million Btu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate the 1-hour averages.

[40 CFR 60.47a(g)]

A.25. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a(f), the owner or operator shall use the reference methods and procedures as specified in this paragraph. Acceptable alternative methods are given in 40 CFR 60.47a(j).

- (1) Method 6 shall be used to determine the SO₂ concentration at the same location as the SO₂ monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.
- (2) Method 7 shall be used to determine the NO_x concentration at the same location as the NO_x monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
- (3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O₂ or CO₂ concentration at the same location as the O₂ or CO₂ monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
- (4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million Btu) heat input.

[40 CFR 60.47a(h)(1), (2), (3) & (4)]

A.26. The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d). Acceptable alternative methods and procedures are given in 40 CFR 60.47a(j).

- (1) Methods 6, 7, and 3B, as applicable, shall be used to determine O₂, SO₂, and NO_x concentrations.
- (2) SO₂ or NO_x (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N₂, as applicable) under Performance Specification 2 of appendix B of 40 CFR 60 (see Specific Condition **A.29.**).
- (3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent (unless otherwise required) and for a continuous monitoring system measuring nitrogen oxides firing solid fuel is 1,000 ppm.
- (5) For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to sulfur dioxide control device is 125

percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

[40 CFR 60.47a(i)(1), (2), (3) & (5)]

A.27. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.47a (see Specific Condition **A.25.**):

- (1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under 40 CFR 60.47a(i), the conditions under 40 CFR 60.46(d)(1) apply (see Specific Condition **A.28.**); these conditions do not apply under 40 CFR 60.47a(h).
- (2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time is 1 hour.
- (3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
- (4) For Method 3B, Method 3A may be used.

[40 CFR 60.47a(j)]

A.28. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified (see Specific Conditions **A.27.** and **A.39.**):

- (1) The emission rate (E) of particulate matter, SO₂ and NO_x may be determined by using the F_c factor, provided that the following procedure is used (see Specific Condition **A.39.**):
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% \text{ CO}_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO₂ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_o is less than 0.97 F_{oa} and when the average difference (\bar{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_o is greater than $1.03 F_{oa}$ and when is positive, then E shall be decreased by that proportion over $1.03 F_{oa}$, e.g., if F_o is $1.05 F_{oa}$, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

[40 CFR 60.46(d)(1)]

A.29. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C.

- (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
- (2) Performance Specification 2--Specifications and Test Procedures for SO_2 and NO_x Continuous Emission Monitoring Systems in Stationary Sources.
- (3) Performance Specification 3--Specifications and Test Procedures for O_2 and CO_2 Continuous Emission Monitoring Systems in Stationary Sources.
- (4) Performance Specification 4--Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources or Performance Specification 4A--Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources.

[Rule 62-297.520, F.A.C.]

Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.}

A.30. Annual Tests Required. Annual compliance tests shall be performed for PM, PM_{10} , CO, SO_2 , NO_x and visible emissions.

[PSD FL-137(A)]

A.31. Renewal Tests Required. Compliance tests shall be performed for VOCs, FI, NH_3 , and H_2SO_4 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. 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.

[PA 88-24(A); and PSD-FL-137(D)]

{Permitting Note: In this condition, “routinely” refers to annually and/or the need to continue testing different control devices in order to reduce mercury emissions below those obtainable through the use of a baghouse, as was originally required by PA-88-24(A). Special compliance tests are also provided for in Specific Condition A.45.(b).}

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

Purpose / Substance	Test Methods
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 ₂ and CO ₂	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, 17, or 29
SO ₂	EPA Method 6, 6B, 6C, or 8
NO _x	EPA Method 7, 7A, 7C, 7D, or 7E
H ₂ SO ₄ 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 ₂ removal efficiency	EPA Method 19
VOCs	EPA Method 18 or 25
Hg	EPA Method 101A or 29
Be	EPA Method 104 or 29
PM ₁₀	EPA Method 201 or 201A
NH ₃	EPA Conditional Method 27

[Rules 62-213.440 and 62-297.401, F.A.C.; 40 CFR 60 and 61; PSD-FL-137(A & D); Title V permit application; and, applicant request in DRAFT Title V Air Operation Permit Comments received 02/12/99]

A.34. Particulate Matter. The owner or operator shall determine compliance with the particulate matter standard as follows:

- (1) The dry basis F factor (O₂) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
- (2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.
 - (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (320 ± 25 °F).

- (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same transverse points as, the particulate run. If the particulate run has more than 12 transverse points, the O₂ transverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ transverse points. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ concentrations at each transverse point.

[40 CFR 60.48a(b)(1) & (2)]

A.35. Sulfur Dioxide. The owner or operator shall determine compliance with the sulfur dioxide standards as follows:

- (1) The percent of potential SO₂ emissions (%P_S) to the atmosphere shall be computed using the following equation:

$$\%P_S = [(100 - \%R_F)(100 - \%R_S)]/100$$

where:

- %P_S = percent of potential SO₂ emissions, percent.
%R_F = percent reduction from fuel pretreatment, percent.
%R_S = percent reduction by SO₂ control system, percent.

- (3) The procedures in Method 19 shall be used to determine the percent SO₂ reduction (%R_S) of any SO₂ control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.
- (4) The appropriate procedures in Method 19 shall be used to determine the emission rate.
- (5) The continuous monitoring system in 40 CFR 60.47a(b) and (d) shall be used to determine the concentrations of SO₂ and CO₂ or O₂.

[40 CFR 60.48a(c)(1), (3), (4) & (5)]

A.36. Fuel - Sulfur Content. (see Specific Conditions **A.3.** and **A.7.**)

1. Coal. The as-fired fuel sulfur content, percent by weight, for coal shall be determined using ASTM D2013-72 and either ASTM D3177-75, ASTM D4239-85, ASTM D3176-74, or the latest edition, to analyze a representative sample of the blended as-fired crushed coal.
2. No. 2. Fuel Oil. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. If the No. 2 fuel oil being delivered has a sulfur content of 0.05% or less, by weight, and the heating value of the delivered No. 2 fuel oil is provided, then the vendor's analysis is acceptable and no further analysis is required. However, if the No. 2 fuel oil being delivered has a sulfur content greater than 0.05%, by weight, the permittee shall have an as-fired sample analyzed (see Specific Condition **A.37.**).

[Rules 62-213.440 and 62-297.440, F.A.C.; 40 CFR 60.17 and 60.47a; and, PSD-FL-137(A)]

A.37. Fuel Sampling and Analysis. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard in the event that the SO₂ continuous emissions monitor is not able to capture valid data:

- a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, to analyze a representative sample of the blended fuel following each fuel delivery.
- b. Determine and record the as-fired fuel sulfur content, percent by weight, for coal using ASTM D2013-72 and either ASTM D3177-75 or ASTM D4239-85, or the latest edition, to analyze a representative sample of the blended as-fired crushed coal.
- c. Determine and record the density (using ASTM D 1298-80, or equivalent) and the calorific heat value in Btu per pound (using ASTM D 240-76, or the latest edition) of the fuel oil combusted.
- d. Determine and record the calorific heat value in Btu per pound of the blended, as-fired crushed coal using ASTM D2013-72 and either ASTM D2015-77 or D3286 (latest version), or the latest edition.
- e. Record daily the amount of each fuel fired, the density of the fuel oil, the heating value of each fuel fired, and the percent sulfur content, by weight, of each fuel fired.
- f. Utilize the information in a., b., c., d. and e., above, to calculate the SO₂ emission rate to ensure compliance at all times.

[Rules 62-213.440 and 62-297.440, F.A.C.; and, 40 CFR 60.17 and 60.47a(h)]

A.38. Nitrogen Oxides. The owner or operator shall determine compliance with the NO_x standard as follows:

- (1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.
- (2) The continuous monitoring system in 40 CFR 60.47a(c) and (d) shall be used to determine the concentrations of NO_x and CO₂ or O₂.

[40 CFR 60.48a(d)(1) & (2)]

A.39. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a:

- (2) The F_C factor (CO₂) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of 40 CFR 60.46(d)(1) (See Specific Condition **A.28.**). The CO₂ shall be determined in the same manner as the O₂ concentration.

[40 CFR 60.48a(e)(2)]

Compliance Test Requirements

A.40. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee

may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.41. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.42. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

A.43. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

A.44. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

A.45. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
 - 9. The owner or operator shall notify the AWQD, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

- (b) Special Compliance Tests. When the AWQD, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the AWQD.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved.]

A.46. If the permittee wants the CEMs RATAs for SO₂, NO_x, and CO to be considered as formal compliance tests, then the permittee must satisfy the applicable notice and submission requirements of Rule 62-297.310(7)(a)9. & (8), F.A.C. (see Specific Conditions **A.45.** and **A.48.**). If Performance Specification 4A of 40 CFR 60, Appendix B is used for CO (see Specific Condition **A.29.**), a cylinder gas audit shall not be used in place of the RATA to determine compliance.

[Rules 62-297.310(7)(a)4.b., 9. & (8) and 62-213.440, F.A.C.; and, 40 CFR 60 Appendix B and Appendix F]

Reporting and Recordkeeping

A.47. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the AWQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the AWQD.

[Rule 62-210.700(6), F.A.C.]

A.48. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the AWQD on the results of each such test.
- (b) The required test report shall be filed with the AWQD as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the AWQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.

4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

A.49. For sulfur dioxide and nitrogen oxides, the following information is reported to the Administrator for each 24-hour period.

- (1) Calendar date.
- (2) The average sulfur dioxide and nitrogen oxides emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standards; and, description of corrective actions taken.

- (3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
 - (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and, description of corrective actions taken.
 - (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data other than startup, shutdown, malfunction, or emergency conditions.
 - (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (7) Identification of the times when hourly averages have been obtained based on manual sampling methods.
 - (8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - (9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.
- [40 CFR 60.49a(b)(1), (2), (3), (4), (5), (6), (7), (8) & (9)]

A.50. If the required quantity of emission data as required by 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR 60.46a(h) is reported to the Administrator for that 30-day period:

- (1) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable.
- (2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable.
- (3) The lower confidence limit for the mean outlet emission rate (E_o^*) and the upper confidence limit for the mean inlet emission rate (E_i^*) as applicable.
- (4) The applicable potential combustion concentration.
- (5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}) as applicable.

[40 CFR 60.49a(c)(1), (2), (3), (4) & (5)]

A.51. If any standards under 40 CFR 60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating if emergency conditions existed during each period (see Specific Condition **A.56.**), and
- (2) Listing the following information:
 - (i) Time periods the emergency condition existed;
 - (ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
 - (iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
 - (iv) Percent reduction in emissions achieved;
 - (v) Atmospheric emission rate (ng/J) of the pollutant discharged; and

(vi) Actions taken to correct control system malfunction.
[40 CFR 60.49a(d)(1) & (2)]

A.52. If fuel pretreatment credit toward the sulfur dioxide emission standard under 40 CFR 60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19 (appendix A); and
- (2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

[40 CFR 60.49a(e)(1) & (2)]

A.53. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and the affected facility during periods of data unavailability are to be compared with operation of the control system and the affected facility before and following the period of data unavailability.

[40 CFR 60.49a(f)]

A.54. The owner or operator of the affected facility shall submit a signed statement indicating whether:

- (1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
- (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (4) Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.49a(g)(1), (2), (3) & (4)]

A.55.a. For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42a(b). Opacity levels in excess of the applicable opacity standard and the dates of such excesses are to be submitted to the Administrator each calendar quarter.

[40 CFR 60.49a(h)]

A.55.b. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to **Appendix 40 CFR 60, Subpart A** (attached), which exceeds the applicable emission limit in Specific Condition **A.5.**, with the exceptions noted in Specific Condition **A.13.b.**

[PSD-FL-137(D)]

A.56. The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60.49a and 40 CFR 60, Subpart A, to the AWQD for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
[Rule 62-213.440(b)(3)(a), F.A.C.; and, 40 CFR 60.49a(i)]

A.57. Fuel Consumption Records. All coal, petcoke and No. 2 fuel oil used shall be recorded on a 24-hour (daily) basis in a log for each CFB Boiler. Copies of fuel analyses containing information on sulfur content and heating values shall also be maintained for a minimum of 5 years.
[PSD-FL-137(A)]

A.58. For each emissions unit, the permittee shall maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.
[PSD-FL-137(A)]

{Permitting Note: An operation log must be kept at all times, using any combination of manually and computer generated records that indicates the state of compliance.}

A.59. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.
[PSD-FL-137(A)]

Miscellaneous

A.60. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.
[Rule 62-204.800(7)(d), F.A.C.]

A.61. CFB Boilers A, B, & C are subject to the requirements of 40 CFR 60, Subparts A and Da; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.
[PSD-FL-137(A)]

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. Short Fiber Recycle Rejects Test Burn. To the extent that it is consistent with Specific Condition **A.3.c.**, 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 may burn all or a portion of the short fiber rejects generated by SCC 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 ninety (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 CFBs 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 CFBs and without violating any other environmental requirements. CBCP shall notify the Department and the AWQD 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 AWQD 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. [PSD-FL-137(A & D)]

A.65. The permittee shall submit annual reports to RESD and DEP/BAR summarizing emissions for each calendar year. The reports will commence during the first year in which petcoke is fired and continue for a total of five calendar years. Such reports are required in order to confirm Cedar Bay's projection of future actual emissions and to demonstrate to the Department's satisfaction that petcoke co-firing did not result in a significant emissions increase. Reporting shall be as follows:

Pollutant	Compliance Procedures
NO _x	Five years of annual reporting by CEMS proving annual facility emissions do not exceed 1799 TPY
CO	Five years of annual reporting by CEMS proving annual facility emissions do not exceed 648 TPY
VOC	Five years of annual reporting by stack test proving annual facility emissions do not exceed 74 TPY
SO ₂	Five years of annual reporting by CEMS proving annual facility emissions do not exceed 1985 TPY
SAM	Five years of annual reporting by stack test proving annual facility emissions do not exceed 7.3 TPY
PM ₁₀	Five years of annual reporting by stack test proving annual facility emissions do not exceed 198 TPY

Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description: Material Handling Systems and Treatment Operations
-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)
-030	Dry Ash Rail Car
-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)

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. (Note: A small portion of the limestone [10% or less] may be utilized as filter-cake material from the lime softening unit portion of the plant’s wastewater treatment system.) The limestone is then 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 2 feeders each at a throughput rate of 6,840 acfm and ADS Storage Bin-2 feeds CFB Boiler C through 2 feeders at a throughput rate of 6,993 acfm.

Dry ash loadout or pug mill 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. The use of the pug mill consists of conditioning the ash with a water source. Boiler bed ash is discharged into a surge hopper. 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.

{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 permit Nos. PSD-FL-137(A, B, C, D & E). 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. 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
-009	ADS Storage Bin – 1	90	2 x 2	102	6,840
-025	ADS Storage Bin – 2	89	2 x 2	102	6,993
-031	Pulverized Limestone Feeders (6)	50	0.3	77	365 (each)
-010	Bed Ash Hopper	25	0.625	96	670
-011	Bed Ash Separator/Collector	104	1	223	5,345
-012	Fly Ash Separator/Collector – 1	38	1	197	5,974
-026	Fly Ash Separator/Collector – 2	38	1	197	5,974
-030	Dry Ash Rail Car	14	1.9 x 2.8	120	6,000
-032	Bed Ash Silo Vent	104	1.3 x 1	80	1,800
-033	Fly Ash Silo Vent	138	1 x 1.5	127	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 Department authorizes up to 1 truckload per calendar day (approximately 25 tons) of filter-cake material from the lime softening unit portion of the plant’s wastewater treatment system to be transferred to the lime storage pile. The maximum material handling/usage rates for all limestone/aragonite unloading and storage shall not exceed the following:

Unloading/Storage Handling/Usage Rate		
Material	TPM	TPY
Limestone/Aragonite	54,000	347,000

- b. For limestone/aragonite, fly ash and bed ash handling sources, the handling usage rates shall not exceed the following:

Material Handled	Tons/Month¹	TPY
Limestone	27,000	275,000
Fly Ash	28,000	336,000
Bed Ash	8,000 (2)	88,000 (2)

¹ Based on 30 consecutive days.

² The Department will require a monitoring system to accurately measure Bed Ash throughput. The applicant will propose (to the Department's satisfaction) the system it recommends to utilize, prior to the initial receipt of pet coke. Actual in-service testing (while combusting coal) will be completed prior to the initial firing of petcoke, demonstrating its adequacy to the Department's satisfaction.

c. 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) and 0310337-005-AC]

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. The dry 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 the AWQD of the method of fugitive emissions control.

3. The dry ash may be loaded onto open or closed rail cars.

[a.: PSD-FL-137(A); b.: PSD-FL-137(C & E); 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. Particulate matter emissions from the emissions units in this subsection shall not exceed 0.003 gr/dscf.

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

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.
- b. 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. Wet Ash Truck Loadout will use a pug mill to condition the ash with a water source to allow the loading of wet ash into open top trailers.

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

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

- 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**. The test method for particulate matter emissions shall be EPA Method 5 or 17, incorporated in Chapter 62-297, F.A.C.
[PSD-FL-137(A, C & E)]

- 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)]

- B.16.** When both a particulate matter and visible emissions compliance test are required, they shall be conducted concurrently, except where inclement weather interferes.
[PSD-FL-137(A)]

- B.17. No. 2 Fuel Oil Sulfur Content**. For the ADS train dryers, the fuel sulfur content, percent by weight, shall be analyzed using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. If the No. 2 fuel oil being delivered has a sulfur content of 0.05% or less, by weight, then the vendor's analysis is acceptable and no further analysis is required. However, if the No. 2 fuel oil being delivered has a sulfur content greater than 0.05%, by weight, the permittee shall have an as-fired sample analyzed. See Specific Conditions **B.4.** and **B.17.**
[Rule 62-213.440, F.A.C; 40 CFR 60.17; and, PSD-FL-137(A)]

- B.18. Required Number of Test Runs**. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables

corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

B.19. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.20. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

B.21. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

B.22. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

B.23. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
- 9. The owner or operator shall notify the AWQD, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

- (b) Special Compliance Tests. When the AWQD, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the AWQD.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
- [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Recordkeeping and Reporting

B.24. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the AWQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the AWQD.

[Rule 62-210.700(6), F.A.C.]

B.25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the AWQD on the results of each such test.
- (b) The required test report shall be filed with the AWQD as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the AWQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission-limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

B.26. For each emission unit, the permittee shall maintain an operation log available for Department inspection that documents the hours of operation and, where No. 2 fuel oil is an issue, the amount consumed on an hourly basis. Additionally, records shall be maintained documenting the date and time of each truckload (approximately 25 tons) of filter-cake material transferred from the lime softening unit portion of the plant's wastewater treatment system to the lime storage pile.

[PSD-FL-137(A)]

{Permitting Note: An operation log must be kept at all times, using any combination of manually and computer generated records that indicates the state of compliance.}

Miscellaneous Requirements.

B.27. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description: Coal Handling/Treatment Systems
-006	Coal Crusher Building
-007	Coal Silo Conveyor
-020	Coal Car Unloading

The coal receiving, storage and transfer systems at the coal storage yard support the operation of the three power boilers. Particulate matter emissions are controlled using fabric filter systems, baghouse systems, water sprays, wetting agents, and full enclosures or partial enclosures, where appropriate. {Permitting notes: These emissions units are regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; and, Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit Nos. PSD-FL-137(A, B, & C). Information regarding flow conditions is as follows:}

E.U. ID No.	Brief Description: Coal Handling Systems (Baghouse)	Stack Height (ft)	Exit Diameter (ft)	Exit Temp. (°F)	Actual Volumetric Flow Rate (acfm)
-006	Coal Crusher Building	20	1.9	77	4,215
-007	Coal Silo Conveyor	142	4	77	23,175
E.U. ID No.	Brief Description: Coal Handling Systems (Fabric Filter)	Nonstack Emission Point Height (ft)	Exit Temp. (°F)	Actual Volumetric Flow Rate (acfm)	Maximum Process or Through-put Rate (acfm)
-020	Coal Car Unloading	N/A	N/A	N/A	N/A

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity.

- a. The material handling/usage rates for coal unloading and storage shall not exceed the following:

Unloading/Storage Handling/Usage Rate		
Material	TPM	TPY
Coal	234,000	1,287,000

- b. The maximum material handling/usage rate for coal and petcoke shall not exceed the following:

Material Handled	Tons/Month¹	TPY
Coal	117,000	1,170,000
Petcoke	40,950	409,500

¹ Based on 30 consecutive days.

[PSD-FL-137(A, B, & C); 0310337-005-AC]

C.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **C.16.**
[Rule 62-297.310(2), F.A.C.]

C.3. Hours of Operation. The coal handling/treatment emissions units may operate continuously, i.e., 8,760 hours/year.
[PSD-FL-137(A, B, & C)]

Emission Limitations and Standards

{Permitting note: 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.}

C.4. Particulate Matter Emissions. Except for coal car unloading and petcoke handling/transfer areas, which are subject to PM emission limitation of 0.01 gr/dscf, particulate matter emissions from the emission units in this subsection shall not exceed 0.003 gr/dscf.
[PSD-FL-137(A, B, & C)]

C.5. Visible Emissions. Visible emissions from all emission units in this subsection shall not exceed 5% opacity. [PSD-FL-137(A, B, & C)]

Emission Controls

C.6. Control Systems.

- (a) Particulate Matter and Visible Emissions. Except for coal car unloading, the control systems for the coal handling emission units shall be either a fabric filter or baghouse system.
 - (b) Fugitive Particulate Matter and Visible Emissions. For coal car unloading and petcoke, unloading/handling, transfer, and storage areas, the control system shall be wet suppression using continuous water sprays during unloading.
- [PSD-FL-137(A, B, & C)]

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.}

C.7. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]

C.8. 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.]

Monitoring of Operations

C.9. 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.}

C.10. Annual visible emissions compliance tests shall be performed for all emissions units in this subsection with baghouse or fabric filter controls.

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

C.11. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.; 40 CFR 60.254(b)(2) & Appendix A; and, PSD-FL-137(A)]

C.12. Particulate Matter Emissions. The test method for particulate matter emissions shall be EPA Method 5 or 17, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.; 40 CFR 60.254(b)(1) & Appendix A; and, PSD-FL-137(A)]

C.13. Subsequent to the initial particulate matter mass emissions test that was required by Permit Nos. 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, have reason to believe that the particulate matter emissions limit is being violated.

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

C.14. When both a particulate matter and visible emissions compliance test are required, they shall be conducted concurrently, except where inclement weather interferes.

[PSD-FL-137(A)]

C.15. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section

of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

C.16. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.17. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

C.18. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

C.19. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

C.20. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
- 9. The owner or operator shall notify the AWQD, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

- (b) Special Compliance Tests. When the AWQD, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the AWQD.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

Recordkeeping and Reporting

C.21. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the AWQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the AWQD.

[Rule 62-210.700(6), F.A.C.]

C.22. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the AWQD on the results of each such test.
- (b) The required test report shall be filed with the AWQD as soon as practical but no later than 45 days after the last sampling run of each test is completed
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the AWQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

C.23. For each emission unit, the permittee shall maintain an operation log available for AWQD inspection that documents the hours of operation.

[PSD-FL-137(A)]

{Permitting Note: An operation log must be kept at all times, using any combination of manually and computer generated records that indicates the state of compliance.}

Miscellaneous Requirements.

C.24. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

Referenced Attachments

Appendix 40 CFR 60, Subpart A

Appendix A-1, Abbreviations, Definitions, Citations, and Identification Numbers

Appendix JEPB Rule 2

Appendix CAM

Appendix H-1, Permit History

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-4, Title V Conditions (version dated 2/12/02)

**Figure 1: Summary Report-
Gaseous and Opacity Excess Emission and Monitoring System Performance**

Table 297.310-1, Calibration Schedule

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Compliance Requirements

Table 1-1, Summary of Air Pollutant Standards and Terms

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-001	Boiler A Circulating Fluidized Bed Boiler (1063 MMBtu/hour-Coal) (380 MMBtu/hour-Oil)	VE	Coal/Petcoke	8760	20%; 27% - 1 six min. period/hr.	N/A	N/A	PSD-FL-137(A)	A.6.		
			Fuel Oil	8760						20%; 27% - 1 six min. period/hr.	N/A
		PM	Coal/Petcoke	8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		PM ₁₀	Coal/Petcoke	8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		CO ¹	Coal/Petcoke	8760	0.175 lb/MMBtu	186.0	758.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		NO _x ²	Coal/Petcoke	8760	0.17 lb/MMBtu	180.7	736.1	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		SO ₂ ³	Coal/Petcoke	8760	0.24 lb/MMBtu	255.1	N/A	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		SO ₂ ⁴	Coal/Petcoke	8760	0.20 lb/MMBtu	N/A	866.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
			Fuel Oil	8760							
		% Sulfur	Coal	8760	1.2% annually, 1.7% on a shipment basis max. 3.2 lb/MMBtu input to CFB max. sulfur content 0.05 %, by wt.					PSD-FL-137(A)	A.7.
			Coal/Petcoke	8760							
			Fuel Oil	8760							
		VOC	Coal/Petcoke	8760	0.015 lb/MMBtu	16.0	65.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
Fuel Oil	8760										
H ₂ SO ₄ mist	Coal/Petcoke	8760	4.66*10 ⁻⁴ lb/MMBtu	0.5	2.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.		
	Fuel Oil	8760									
Fl	Coal/Petcoke	8760	7.44*10 ⁻⁴ lb/MMBtu	0.79	3.2	N/A	N/A	PSD-FL-137(A), BACT	A.5.		
	Fuel Oil	8760									
Pb	Coal/Petcoke	8760	6.03*10 ⁻⁵ lb/MMBtu	0.06	0.26	N/A	N/A	PSD-FL-137(A), BACT	A.5.		
	Fuel Oil	8760									
Hg	Coal/Petcoke	8760	2.89*10 ⁻⁵ lb/MMBtu	0.03	0.13	N/A	N/A	PSD-FL-137(A), BACT	A.5.		
	Fuel Oil	8760									
Be	Coal/Petcoke	8760	8.70*10 ⁻⁶ lb/MMBtu	0.01	0.04	N/A	N/A	PSD-FL-137(A), BACT	A.5.		
	Fuel Oil	8760									
NH ₃	Coal/Petcoke	8760	10 ppmvd @ 100% capacity					PSD-FL-137(A)	A.8.		

Table 1-1, Summary of Air Pollutant Standards and Terms

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)	
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY			
			Fuel Oil	8760	30 ppmvd							
-002	Boiler B Circulating Fluidized Bed Boiler (1063 MMBtu/hour-Coal) (380 MMBtu/hour-Oil)	VE	Coal/Petcoke	8760	20%; 27% - 1 six min. period/hr.			N/A	N/A	PSD-FL-137(A)	A.6.	
			Fuel Oil	8760	20%; 27% - 1 six min. period/hr.			N/A	N/A	PSD-FL-137(A)	A.6.	
		PM	Coal/Petcoke	8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		PM ₁₀	Coal/Petcoke	8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		CO ¹	Coal/Petcoke	8760	0.175 lb/MMBtu	186.0	758.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		NO _x ²	Coal/Petcoke	8760	0.17 lb/MMBtu	180.7	736.1	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		SO ₂ ³	Coal/Petcoke	8760	0.24 lb/MMBtu	255.1	N/A	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		SO ₂ ⁴	Coal/Petcoke	8760	0.20 lb/MMBtu	N/A	866.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
			Fuel Oil	8760								
		% Sulfur	Coal	8760	1.2% annually, 1.7% on a shipment basis max. 3.2 lb/MMBtu input to CFB max. sulfur content 0.05 %, by wt.						PSD-FL-137(A)	A.7.
			Coal/Petcoke	8760								
			Fuel Oil	8760								
		VOC	Coal/Petcoke	8760	0.015 lb/MMBtu	16.0	65.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.	
Fuel Oil	8760											
H ₂ SO ₄ mist	Coal/Petcoke	8760	4.66*10 ⁻⁴ lb/MMBtu	0.5	2.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.			
	Fuel Oil	8760										
Fl	Coal/Petcoke	8760	7.44*10 ⁻⁴ lb/MMBtu	0.79	3.2	N/A	N/A	PSD-FL-137(A), BACT	A.5.			
	Fuel Oil	8760										
Pb	Coal/Petcoke	8760	6.03*10 ⁻⁵ lb/MMBtu	0.06	0.26	N/A	N/A	PSD-FL-137(A), BACT	A.5.			
	Fuel Oil	8760										
Hg	Coal/Petcoke	8760	2.89*10 ⁻⁵ lb/MMBtu	0.03	0.13	N/A	N/A	PSD-FL-137(A), BACT	A.5.			
	Fuel Oil	8760										
Be	Coal/Petcoke	8760	8.70*10 ⁻⁶ lb/MMBtu	0.01	0.04	N/A	N/A	PSD-FL-137(A), BACT	A.5.			
	Fuel Oil	8760										

Table 1-1, Summary of Air Pollutant Standards and Terms

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
		NH ₃	Coal/Petcoke Fuel Oil	8760 8760	10 ppmvd @ 100% capacity 30 ppmvd					PSD-FL-137(A)	A.8.
-003	Boiler C Circulating Fluidized Bed Boiler (1063 MMBtu/hour-Coal) (380 MMBtu/hour-Oil)	VE	Coal/Petcoke Fuel Oil	8760 8760	20%; 27% - 1 six min. period/hr. 20%; 27% - 1 six min. period/hr.			N/A N/A	N/A N/A	PSD-FL-137(A) PSD-FL-137(A)	A.6. A.6.
		PM	Coal/Petcoke Fuel Oil	8760 8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		PM ₁₀	Coal/Petcoke Fuel Oil	8760 8760	0.018 lb/MMBtu	19.1	78.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		CO ¹	Coal/Petcoke Fuel Oil	8760 8760	0.175 lb/MMBtu	186.0	758.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		NO _x ²	Coal/Petcoke Fuel Oil	8760 8760	0.17 lb/MMBtu	180.7	736.1	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		SO ₂ ³	Coal/Petcoke Fuel Oil	8760 8760	0.24 lb/MMBtu	255.1	N/A	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		SO ₂ ⁴	Coal/Petcoke Fuel Oil	8760 8760	0.20 lb/MMBtu	N/A	866.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		% Sulfur	Coal Coal/Petcoke Fuel Oil	8760 8760 8760	1.2% annually, 1.7% on a shipment basis max. 3.2 lb/MMBtu input to CFB max. sulfur content 0.05 %, by wt.					PSD-FL-137(A)	A.7.
		VOC	Coal/Petcoke Fuel Oil	8760 8760	0.015 lb/MMBtu	16.0	65.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		H ₂ SO ₄ mist	Coal/Petcoke Fuel Oil	8760 8760	4.66*10 ⁻⁴ lb/MMBtu	0.5	2.0	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		Fl	Coal/Petcoke Fuel Oil	8760 8760	7.44*10 ⁻⁴ lb/MMBtu	0.79	3.2	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		Pb	Coal/Petcoke Fuel Oil	8760 8760	6.03*10 ⁻⁵ lb/MMBtu	0.06	0.26	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		Hg	Coal/Petcoke Fuel Oil	8760 8760	2.89*10 ⁻⁵ lb/MMBtu	0.03	0.13	N/A	N/A	PSD-FL-137(A), BACT	A.5.
		Be	Coal/Petcoke	8760	8.70*10 ⁻⁶ lb/MMBtu	0.01	0.04	N/A	N/A	PSD-FL-137(A), BACT	A.5.

Table 1-1, Summary of Air Pollutant Standards and Terms

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions		Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)	
					Standard(s)	lbs./hour	TPY	lbs./hour			TPY
		NH ₃	Fuel Oil Coal/Petcoke Fuel Oil	8760 8760 8760	10 ppmvd @ 100% capacity 30 ppmvd				PSD-FL-137(A)	A.8.	
-004	ADS Train -1	VE	Fuel Oil	8030	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8030	0.003 gr/dscf			1.1	2.2	PSD-FL-137(A,B & C)	B.5.
		% Sulfur		8030	max. sulfur content 0.05 %, by wt.					PSD-FL-137(A)	B.7.
-005	ADS Train - 2	VE	Fuel Oil	8030	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8030	0.003 gr/dscf			1.1	2.2	PSD-FL-137(A,B & C)	B.5.
		% Sulfur		8030	max. sulfur content 0.05 %, by wt.					PSD-FL-137(A)	B.7.
-006	Coal Crusher Building	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	C.5.
		PM		8760	0.003 gr/dscf			0.11	0.47	PSD-FL-137(A,B & C)	C.4.
-007	Coal Silo Conveyor	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	C.5.
		PM		8760	0.003 gr/dscf			0.57	2.51	PSD-FL-137(A,B & C)	C.4.
-009	ADS Storage Bin	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.16	0.71	PSD-FL-137(A,B & C)	B.5.
-025	ADS Storage Bin	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.17	0.75	PSD-FL-137(A,B & C)	B.5.
-010	Bed Ash Hopper	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.016	0.071	PSD-FL-137(A,B & C)	B.5.
-011	Bed Ash Separator/Collector	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.1	0.46	PSD-FL-137(A,B & C)	B.5.
-012	Fly Ash Separator/Collector 1	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.12	0.53	PSD-FL-137(A,B & C)	B.5.
-013	Pelletizer Bed Ash Receiver Bin	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.095	0.42	PSD-FL-137(A,B & C)	B.5.
-014	Pelletizer Fly Ash Receiver Bin	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.11	0.47	PSD-FL-137(A,B & C)	B.5.
-015	Pellet Vibratory Screen Screen Hopper/Feed Hopper	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A,B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.34	1.5	PSD-FL-137(A,B & C)	B.5.
-016	Pelletizing Ash Recycle Tank	VE		8760	shall not exceed 5%					PSD-FL-137(A,B & C)	B.6.

Table 1-1, Summary of Air Pollutant Standards and Terms

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
		PM		8760	0.003 gr/dscf			0.03	0.12	PSD-FL-137(A, B & C)	B.5.
-017	Pelletizing Recycle Hopper	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.0054	0.024	PSD-FL-137(A, B & C)	B.5.
-018	Cured Pellet Silos Discharge Belt	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.048	0.21	PSD-FL-137(A, B & C)	B.5.
-019	Pellet Recycle Conveyor	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.04	0.18	PSD-FL-137(A, B & C)	B.5.
-020	Coal Car Unloading	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	C.5.
		PM		8760	0.003 gr/dscf					PSD-FL-137(A, B & C)	C.4.
-021	Ash Pellet Hydrator	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.01 gr/dscf			1.3	5.5	PSD-FL-137(A, B & C)	B.5.
-022	Ash Pellet Curing Silo	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.01 gr/dscf			0.5	2.2	PSD-FL-137(A, B & C)	B.5.
-023	Ash Pelletizing Pan	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.01 gr/dscf			1.2	5.1	PSD-FL-137(A, B & C)	B.5.
-026	Fly Ash Separator/Collector 2	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.12	0.54	PSD-FL-137(A, B & C)	B.5.
-029	Pelletizing Rail Loadout	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.12	0.51	PSD-FL-137(A, B & C)	B.5.
-030	Dry Ash Rail Car/Truck Loadout	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.46	2.0	PSD-FL-137(A, B & C)	B.5.
-031	Pulverized Limestone Feeders (6)	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.045	0.2	PSD-FL-137(A, B & C)	B.5.
-032	Bed Ash Silo Vent	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.05	0.2	PSD-FL-137(A, B & C)	B.5.
-033	Fly Ash Silo Vent	VE		8760	shall not exceed 5%			N/A	N/A	PSD-FL-137(A, B & C)	B.6.
		PM		8760	0.003 gr/dscf			0.084	0.37	PSD-FL-137(A, B & C)	B.5.

Notes:

- * The "Equivalent Emissions" listed are for informational purposes.
- 1. Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour average applies.
- 2. Thirty-day rolling average
- 3. Three-hour rolling average
- 4. Twelve-month rolling average

Table 2-1, Summary of Compliance Requirements

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency	Min. Compliance Test	CMS ¹	See Permit Condition(s)	
					Frequency	Base Date	Duration			
-001	Boilers A, B, and C circulating fluidized bed boiler (1063 MMBtu/hour -Oil)	VE	Coal	EPA method 9	Annually		60 Minutes	Yes	A.19., A.20., A.21., A.33.	
-002		Fuel Oil		Annually		60 Minutes	Yes			
-003		PM	Coal	EPA method 5 or 17	Annually		120 minutes	No		A.19., A.20., A.33., A.34.
		PM ₁₀	Fuel Oil	or EPA methods 201 and 201a	Annually		120 minutes	No		
		CO ²	Coal	EPA Method 10	Annually		1 hour	Yes		A.19., A.20., A.21., A.33.
			Fuel Oil		Annually		1 hour	Yes		
		NO _x ³	Coal	EPA Method 7, 7A, 7C,	Annually		1 hour	Yes		A.19., A.20., A.21., A.33., A.38.
			Fuel Oil	7D, or 7E	Annually		1 hour	Yes		
		SO ₂ ⁴	Coal	EPA Method 6, 6B, 6C, or 8	Annually		1 hour	Yes		A.19., A.20., A.21., A.33.
			Fuel Oil		Annually		1 hour	Yes		
	SO ₂ ⁵	Coal	EPA Method 6, 6B, 6C, or 8	Annually		1 hour	Yes	A.19., A.20., A.21., A.33.		
		Fuel Oil		Annually		1 hour	Yes			
	% Sulfur	Coal	ASTM D2013-72, and either ASTM D3177-75, ASTM D4239-85, ASTM D3176-74	Annually		1 hour		A.36.		
	% Sulfur	Coal/Petcoke	ASTM D2622-92, or ASTM D4294-90 or both ASTM D4057-88 and ASTM D129-91	Monthly	Composite of daily samples	1 hour		A.36.		
	% Sulfur	Fuel Oil	ASTM D2622-92, or ASTM D4294-90 or both ASTM D4057-88 and ASTM D129-91	Annually		1 hour				
	VOC	Coal	EPA Method 18 or 25	Every 5 years		1 hour	No	A.19., A.20., A.33.		
		Fuel Oil		Every 5 years		1 hour	No			

Table 2-1, Summary of Compliance Requirements

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency	Min. Compliance Test Duration	CMS ¹	See Permit Condition(s)
					Frequency	Base Date	Test Duration		
		H ₂ SO ₄ mist	Coal Fuel Oil	EPA Method 8	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33.
-001 -002 -003	(continued)	FI	Coal Fuel Oil	EPA Method 13A or 13B	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33.
		Pb ⁶	Coal Fuel Oil	EPA Method 12	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33., A.32.
		Hg ⁶	Coal Fuel Oil	Method 101A	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33., A.32.
		Be ⁶	Coal Fuel Oil	EPA Method 104	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33., A.32.
		NH ₃	Coal Fuel Oil	EPA Conditional Method 27	Every 5 years	Every 5 years	1 hour 1 hour		A.19., A.20., A.33.
	This section applies to the following emissions units: -004, -005, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -021, -022, -023, -025, -026, -029, -030, -031, -032, -033	VE		EPA Method 9	Annually		1 hour	No	B.13., B.15. ⁸ , B.16., B.18. - B.23.
		PM		EPA Method 5 or 17	Annually		1 hour	No	B.14., B.15. ⁸ , B.16., B.18. - B.23.
		% Sulfur ⁷		ASTM D2622-92, or ASTM D4294-90 or both ASTM D4057-88 and ASTM D129-91	Annually		1 hour		B.17., B.18. - B.23.

Table 2-1, Summary of Compliance Requirements

Cedar Bay Generating Company, L. P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date	Min. Compliance Test Duration	CMS ¹	See Permit Condition(s)
	This section applies to the following emissions units: -006, -007, -020	VE		EPA Method 9	Annually		1 hour	No	C.11., C.13. ⁸ , C.14., C.15.-C.20.
		PM		EPA Method 5 or 17	Annually		1 hour	No	C.12., C.13. ⁸ , C.14., C.15.-C.20.

Notes:

1. CMS [=] continuous monitoring system used for monitoring requirement in lieu of fuel sampling and analysis if marked 'yes'.
(Acceptable as long as CMS is maintained and calibrated as required.)
2. Eight-hour rolling average, except for initial and annual compliance tests.
and the CEM certification, when the 1-hour applies.
3. Thirty-day rolling average.
4. Three-hour rolling average.
5. Twelve-month rolling average.
6. Tests must be run every five years until three consecutive tests (including, if succesful, the initial compliance test) are within the annual emission limits specified.
7. Sulfur Content only applies to the ADS trains in this section (Units -004 & -005).
8. Applies to emission units with a baghouse.

Appendix H-1, Permit History/ID Number Changes

(For tracking purposes only)

Cedar Bay Cogeneration Company, L.P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337 -007-AV
Facility ID No.: 0310337

Permit No.	Issue Date	Expiration Date	Extended Date	Revised Date(s)
PSD-FL-137 PSD-FL-137(A)	03/29/91 11/23/93	replaced by PSD-FL-137(A) N/A		08/08/95, 06/04/96, 03/09/00, 11/09/01, 03/12/02, 12/20/02

ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 31DVL160337
To: **Facility ID No.:** 0310337

Appendix I-1: List of Insignificant Emissions Units and/or Activities.

Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility

PROPOSED Permit No.: 0310337-007-AV
Facility ID No.: 0310337

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Ash Handling Systems Pressure/Vacuum Relief Valves.
2. Coal additives for improved flow.
3. Magnetic Separator Chute.
4. Cation Exchanger; Anion Exchanger.
5. Amine Solution Mixer Tank.
6. Air Compressors, compressed air system.
7. Sandblaster with Filter
8. Fuel Oil Truck Unloading Station. Fuel Oil transfer pump 1 FOA-P-1, 175 gpm.
9. Fuel Oil Storage Tank - (1 FOA-TNK-1).
10. Acid Storage Tank.
11. Phosphate Solution Mixer Tank.
12. Chemical Waste Mixer Tank.
13. Plant Ground Maintenance.
14. Maintenance (Cleaning, Metalworking, Soldering, Welding, Non-Asbestos Removal).
15. Sodium Hypochlorite Storage Tank - (HRE-TNK-3). All other closed tanks for waste/waste water treatment. Includes H₂SO₄, NH₃, Caustic, Phosphate, Amine, Oxygen Scavenger, and Magnesium Chloride.
16. Chemical Waste Sumps.
17. CEM Calibration Gases.
18. Street Sweeping; outdoor vacuum truck cleanup.
19. Fuel Oil Heavy Equipment Diesel Tanks- (2) Tanks.
20. (2) Diesel Fuel Fired Pumps (emergency fire pump and boiler feed pump) collectively firing less than 16,000 gallons of diesel fuel per year.
21. Diesel Fuel Pump Oil Tank (1 WSE-TNK-2), 320 Gallons.
22. H₂ Vent.
23. DeNO_x Facility (NH₃ addition).
24. Transformer Maintenance.
25. Steam Vents.
26. N₂ cap during boiler shutdown.

27. Building Vents.
28. Lab Hood, other laboratory activities.
29. Soot Blowing.
30. Turbine Lube Oil Vent with Oil Mist Eliminator.
31. RO - High Temp AntiFoam Addition to Brine Concentrator (BC).
32. RO - Degasifier Packed Column (Sulfur odor, H₂S emissions).
33. Coal Pile Run-off Pond.
34. Tower Loop - Soda Ash Storage Silo.
35. Tower Loop - Lime Storage Silo.
36. Yard Area Runoff Pond (Unlined).
37. Service Area Runoff Pond (Lined).
38. RO - AntiScalant Tank Addition to BC.
39. RO - High Temp AntiFoam Tank Additive to Crystallizer.
40. SK - DensaDeg Mixer/Settler.
41. Coal transfer to coal receiving pile via lowering well (partial enclosure, lowering well is a "chute" with openings for distribution of coal).
42. Wind erosion from coal receiving pile.
43. Wind erosion from 27-day coal storage pile.
44. Ash handling front-end loader traffic.
45. Wind erosion related to ash handling operations.
46. Bed ash transfer from boilers to wheelbarrows (bed ash rejects).
47. Front-end loader transfers to temporary pile.
48. Temporary rail car loading of particulate debris.
49. Limestone pile wind erosion.
50. Maintenance Painting.
51. Coal Feeders (6) - Enclosed Transfer to CB-1 Sandwich Belt (CF-2).
52. CB-1 to CB-2 Transfer (CF-3)
53. Lime Storage Silo (*Vent Filter*)
54. Soda Ash Storage Silo (*Vent Filter*)
55. Parts Washers
56. Cooling Tower