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PS Form **3800**, April 1995

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Cedar Bay Gen. Co.
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Jacksonville, FL
32224

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Division of Air Resources Management
Bureau of Air Regulation, NSRS
2600 Blair Stone Road, MS 5505
Tallahassee, Florida 32399-2400

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MAR 16 2000

BUREAU OF AIR REGULATION

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 9, 2000

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

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

Dear Mr. Walker:

The applicant, Cedar Bay Generating Company, L.P., applied on March 22, 1999, to the Department for a modification to PSD permit number PSD-FL-137 for its Cedar Bay Generating Plant located in Duval County. The modification is to allow the three fluidized bed circulating boilers (A, B and C) to operate with changes to their method of compliance for startup and shutdown, SO_2 emissions, mercury testing, heat input and stack testing methodology. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Specific Condition No. II.A.3:

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

	Emission Limitations			
Pollutant	lbs/MMBtu	lbs/hr.	TPY	TPY for 3 CFBs
CO[5]	0.175[1]	186[1]	~~758~~ 758[4]	2273
NOx	0.17[2]	180.7[2]	736.1	2208
SO_2	~~0.24~~[3] 0.30[3]	~~255.1~~[3] 318.9[3]	--	--
	~~0.20~~[4] 0.20[2]	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM_{10}	0.018	19.1	78	234
H_2SO_4 mist	4.66×10^{-4}	0.50	2.0	6.1
Fluorides	7.44×10^{-4}	0.79	3.2	9.7
Lead	6.03×10^{-5}	0.06	0.26	0.78
Mercury	2.89×10^{-5}	0.03	0.13	0.38
Beryllium	8.70×10^{-6}	0.01	0.04	0.11

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

1 Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification when the 1-hour applies.
2 Thirty-day rolling average.
3 Three-hour rolling average.
4 Twelve-Month rolling average.
5 See Specific Condition II.A.9.e. for alternative CO emission limits during specific operating modes.

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

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

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

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

h. To the extent that it is consistent with Specific Condition No. II.A.1.b., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998, by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, L.P., and the following, CBCP ~~shall~~ may burn all or a portion of the short fiber rejects generated by SKC in processing recycled paper. Prior to burning the rejects as a supplemental fuel however, CBCP shall conduct a test burn to determine the effects of burning the rejects. ~~No less than~~ At least ninety (90) days prior to ~~completion of construction~~ any proposed test burn, CBCP shall submit a plan to the Department for conducting a 30-day test burn ~~within one year after initial compliance testing. That test burn shall be~~ designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Specific Condition No. II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify the Department and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to the Department and to the RESD within forty-five (45) days of completion of the test burn. The Department shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this condition.

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

c. ~~CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the Department, RESD and EPRI, CBC shall submit a mercury control test protocol to the Department for approval by December 1, 1993. Results of the test shall be submitted to the Department within 90 days of completion.~~ Mercury testing shall not be routinely required. However, should the Department have reason to believe that a change in mercury emissions has occurred (e.g. via a change in fuel quality, particulate removal equipment, etc.) mercury testing shall be required.

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

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

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

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

e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Specific Condition No. II.A.11., herein, which exceeds the applicable emission limit in Specific Condition No. II.A.3 with the following exceptions. For the specific periods defined below, the emission limits of Carbon Monoxide (CO) shall be as follows:

Warm startup – emissions up to 186 lb/hr (no lb/MMBtu limit) with sufficient documentation
Cold startup – up to 10 hours (per cold startup) of CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation
Refractory Curing – Must notify agency at least 24 hours prior to commencing; CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

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

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

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

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

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

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

Clerk Stamp

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

Kmi Jeber 3-9-00
(Clerk) (Date)

FINAL DETERMINATION
CEDAR BAY GENERATING COMPANY, L.P.
CEDAR BAY GENERATING PLANT
PSD PERMIT MODIFICATIONS

The Department distributed a Public Notice package on December 8, 1999 for the project allowing for the three fluidized bed circulating boilers (A, B and C) to operate with changes to their method of compliance for startup and shutdown, SO_2 emissions, mercury testing, heat input and stack testing methodology. The subject facility is the Cedar Bay Generating Plant located at 9640 East Port Road, Jacksonville, Duval County. The Public Notice of Intent to Issue was published on December 23 in The Florida Times Union.

No comments were received by the Department from the public or the Fish and Wildlife Service pursuant to the Notice.

Comments were received from the U.S. Environmental Protection Agency (EPA) in a letter dated January 21, 2000. No comments were received from Cedar Bay, however comments in response to EPA's letter of January 21 were received.

There were six comments from the EPA, mostly dealing with modeling considerations and these are addressed below.

1. *As indicated in Specific Condition No. II.A.9.e. of the draft permit, FDEP is proposing to allow excess emissions of CO due to startup, shutdown or malfunction for up to 10 hours per cold startup as well as allowing excess emissions during warm startups and refractory curing. It is the U.S. Environmental Protection Agency's policy that BACT applies during all operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.*

   RESPONSE: The Department understands the issue raised by the EPA and largely agrees with it, noting that the startup and shutdown emissions are not being permitted as new emissions. Historically, these emissions (as well as emissions due to refractory curing) have occurred and *were being reported as excess emissions* with no limit. The applicant and the Department have intended to ensure by this permitting action that excess emissions as a result of startup and shutdown do not occur by reviewing and defining permissible emission limits and time frames for each of these operating modes. Restated, the emissions are being accounted for in the planning, design and implementation of operating procedures for the process and control equipment. To contrast, a separate (but recent) permitting action for a Fluidized Bed repowering of JEA's Northside facility (PSD-265) granted up to 12 hours in 24 of excess emissions for all pollutants and any startups. The action herein more closely defines emissions for startup and shutdown, ensuring that there is no net annual increase over those emissions contemplated in the original PSD permit by imposing an annual CO cap, which includes emissions during all operating modes.

2. *Class I Area Impact Assessment - The Class I air quality assessment does not provide significant impact assessments for the CBG emissions in the Class I areas. Only cumulative increment impact analyses are addressed in the air quality analysis report. The maximum impacts from CBG in the Class I area would be of value in this assessment.*

   RESPONSE: Significant impact modeling for the Class I area was done by the applicant. The maximum predicted 3-hour SO_2 impact in the Class I area from the Cedar Bay facility is 7.4 ug/m^3.

3. *Class I and Class II Emission Inventories – The specific procedures used to develop the emission source inventories used in the cumulative impact assessment for both PSD increment and National Ambient Air Quality Standard (NAAQS) compliance (Tables 1-3 through 1-5 of the November 1999 Air Quality Analysis Report) were not provided. It appears that the inventories used were from other air modeling studies. For Class II cumulative impact assessments, emission sources within at least 50 km of the significant impact area must be considered in the modeling assessment. For the Class I impact analysis, emission sources within 100 km to 150 km with a potential significant impact in the Class I area must be considered in the modeling. These distances may include sources located in Georgia. Confirmation is needed that the proper emission inventories were used in the cumulative impact modeling.*

   RESPONSE: The emission inventory used in the modeling is consistent with emission inventories used and accepted by FDEP for other recent projects [Jacksonville Electric Authority's Northside Repowering Project (February 1999), Jefferson Smurfit's Cluster Rule Compliance Demonstration (August 1999), and Georgia-Pacific Corporation's (Palatka, FL) Cluster Rule Compliance Demonstration (July 1999)] in the Jacksonville area. This emissions inventory was also used and accepted by FDEP for this project for demonstrating compliance with annual and 24-hour AAQS and PSD increments.

   For the PSD Class II increment analysis, the North Carolina Screening Technique was used to eliminate sources from consideration that were unlikely to have significant interaction with the project based on their magnitude of emissions and distance from the project's significant impact area. The significant impact distance of the Cedar Bay facility is 19 km. As a result, facilities within 69 km [the significant impact distance of the entire facility (19 km) plus 50 km] were considered in the PSD Class II increment and AAQS analysis.

   The PSD Class I inventory was expanded to include Georgia PSD sources, and the applicant performed revised modeling with the expanded inventory. Tables 2-6 and 2-7 of the application were updated by the applicant to include the revised results. The revised modeling results showed that Cedar Bay's contribution to any predicted Class I exceedances is less than significant; therefore, the modification is permittable by Florida air permitting rules.

4. *Operational Configuration Worst Case – The impact analysis indicates a single stack for the three CBG boilers. All impact assessments were performed, assuming all three boilers at 110 percent of full load, with an SO2 emission rate of 0.36 lb/MMBtu. (Note: Assuming 110 percent heat rate, the emission rate modeled is associated with 0.36 lb/MMBtu not the 0.40 lb/MMBtu indicated in the report.) This is not a realistic assumption and may not provide the operating scenario producing the worst case ambient impacts.*

   RESPONSE: The modeling analysis did assume that all three CFBs were operating at 100% capacity, not 110%. However, specific condition II.A.1.c of the permit limits the heat input of all

three boilers to 100% (3189 MMBtu/hr). To verify that this operating scenario produced the highest predicted impacts, the CFBs were modeled at 33, 66, and 100 percent of operating capacity. The stack parameters and total maximum predicted 3-hour impacts for these operating scenarios are presented below. In all cases, operation of the CFBs at 100% capacity resulted in the maximum predicted impacts.

Stack Parameters Used in the Load Analysis for the CFBs

	Stack Parameters						
Source Description	**Height (m)**	**Diameter (m)**	**Temp. (K)**	**Velocity (m/s)**	**Emission Rate (g/s)**	**Maximum Predicted Impact Class I Area (ug/m^3)**	**Maximum Predicted Impact Class II Area (ug/m^3)**
CFBs Operating at 33% Capacity	122.8	4.05	328	12.23	40.11	3.3	64.3
CFBs Operating at 66% Capacity	122.8	4.05	328	24.47	80.22	4.8	87.2
CFBs Operating at 100% Capacity	122.8	4.05	328	36.70	120.33	7.0	102.1

5. *Modeled PSD Increment Violations – Since CBG does not significantly impact modeled Class I and II PSD increment violations, these violations will not affect the permitting of CBG. The modeled violations must be addressed and resolved by the Florida Department of Environmental Protection.*

   RESPONSE: FDEP will address this issue separately from this action.

6. *Class I Area FLM – The U.S. Fish and Wildlife Service federal land manager for the Wolf Island and Okefenokee PSD Class I areas should be notified of this PSD permit modification and given the opportunity to comment.*

   RESPONSE: A copy of the Draft permit was forwarded to the Federal Land Manager (the U.S. Fish and Wildlife Service) on December 8, 1999.

CONCLUSION

The project will not cause or significantly contribute to a violation of any National Ambient Air Quality Standard or applicable increment.

The final action is to issue the permit as proposed.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

a) Have access to and copy and records that must be kept under the conditions of the permit;
b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

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

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

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

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

G.13 This permit also constitutes:

a) Determination of Best Available Control Technology (X)
b) Determination of Prevention of Significant Deterioration (X); and
c) Compliance with New Source Performance Standards (X).

G.14 The permittee shall comply with the following:

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

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

c) Records of monitoring information shall include:

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

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

Memorandum

Florida Department of
Environmental Protection

BAR

TO: Howard L. Rhodes

THRU: Clair Fancy
Al Linero

FROM: Mike Halpin

DATE: March 3, 2000

SUBJECT: Cedar Bay Generation, L.P. PSD Permit Modifications

(9)

Attached for approval and signature is a modification to the PSD permit for the subject facility. The Public Notice requirements have been met on December 23, 1999 by publishing in the Florida Times-Union.

Comments were received by the US EPA (Region IV) and are addressed within the Final Determination.

I recommend your approval and signature.

Day 90 is 03/17/00.

Attachments

/mph

Florida Department of

Memorandum **Environmental Protection**

TO: File

FROM: Jonathan Holtom

DATE: August 10, 2001

SUBJECT: Cedar Bay Cogeneration Permit Numbers
Facility ID #: 0310337

The revision to PSD-FL-137 contained in this folder (issued 3/9/00) should have been labeled as PSD-FL-137D, revision to PSD-FL-137A. It was never logged into ARMS, and therefore, should not have been given the permit/project number of 0310337-003-AC, as was typed on the label to this folder.

For scanning purposes, and for all future references, the permitting action contained herein should be referred to as PSD-FL-137D.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JAN 2 1 2000

4 APT-ARB

Mr. A. A. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Preliminary Determination and Draft Permit for Cedar Bay Generating Plant (PSD-FL-137) located in Duval County, Florida

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for Cedar Bay Generating Plant dated December 8, 1999. The preliminary determination is for the proposed modification of the operation of three circulating fluidized bed steam generators (boilers) and associated coal, limestone and ash handling areas. The boilers primarily combust crushed coal with No. 2 fuel oil combusted as backup fuel. As proposed, the permit allows several changes in permit conditions, including the following: an increase in excess emissions of carbon monoxide (CO), an increase in the 3-hour sulfur dioxide (SO_2) emissions rate and a 10% increase in maximum heat input limits. Total emissions from the proposed project are not above the thresholds requiring PSD review for any regulated pollutants; however, some air quality impact modeling may be required for SO_2.

Based on our review of the preliminary determination and draft PSD permit, we have the following comments on topics other than the air impact assessment. Air impact comments are provided at the end of this letter.

1. As indicated in Specific Condition No. II.A.9.e of the draft permit, FDEP is proposing to allow excess emissions of CO due to startup, shutdown or malfunction for up to 10 hours per cold startup as well as allowing excess emissions during warm startups and refractory curing. It is the U.S. Environmental Protection Agency's policy that BACT applies during all normal operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.

In terms of the air quality impact assessment, our comments regarding the modifications to the Cedar Bay Generating Plant (CBG) preliminary determination and draft PSD permit are as follows:

2. Class I Area Impact Assessment - The Class I air quality assessment does not provide significant impact assessments for the CBG emissions in the Class I areas. Only cumulative increment impact analyses are addressed in the air quality analysis report. The maximum impacts from CBG in the Class I area would be of value in this assessment.

3. Class I and Class II Emission Inventories - The specific procedures used to develop the emission source inventories used in the cumulative impact assessment for both PSD increment and National Ambient Air Quality Standard (NAAQS) compliance (Tables 1-3 through 1-5 of the November 1999 Air Quality Analysis Report) were not provided. It appears that the inventories used were from other air modeling studies. For Class II cumulative impact assessments, emission sources within at least 50 km of the significant impact area must be considered in the modeling assessment. For the Class I impact analysis, emission sources within 100 km to 150 km with a potential significant impact in the Class I area must be considered in the modeling. These distances my include sources located in Georgia. Confirmation is needed that the proper emission inventories were used in the cumulative impact modeling.

4. Operational Configuration Worst Case - The impact analysis indicates a single stack for the three CBG boilers. All impact assessments were performed, assuming all three boilers at 110 percent of full load, with an SO_2 emission rate of 3.6 lb/MMBtu. (Note: Assuming 110 percent heat rate, the emission rate modeled is associated with 0.36 lb/MMBtu not the 0.40 lb/MMBtu indicated in the report.) This is not a realistic assumption and may not provide the operating scenario producing the worst case ambient impacts.

5. Modeled PSD Increment Violations - Since CBG does not significantly impact the modeled Class I and II PSD increment violations, these violations will not affect the permitting of CBG. The modeled violations must be addressed and resolved by the Florida Department of Environmental Protection.

6. Class I Area FLM - The U.S. Fish and Wildlife Service federal land manager for the Wolf Island and Okefenokee PSD Class I areas should be notified of this PSD permit modification and given the opportunity to comment.

Thank you for the opportunity to comment on the Cedar Bay Generating Plant preliminary determination and draft PSD permit. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Stan Krivo at 404-562-9123.

Sincerely,

Douglas Neeley

R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: J. Walker, CB
B. Oven, PPS
Duval Co.
NED
NPS
C. Holladay, BAR

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PS Form **3800**, April 1995

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- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
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3. Article Addressed to:
Jeffrey Walker, Env. Mgr
Cedar Bay Gen. Co.
P O Box 26324
Jacksonville, Fl 32223

4a. Article Number
Z 031 391 896

4b. Service Type
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V. C. Benoit

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Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation, NSRS
2600 Blair Stone Road, MS 5505
Tallahassee, Florida 32399-2400

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BUREAU OF AIR REGULATION

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

December 8, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey A. Walker
Environmental Manager
Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant
P.O. Box 26324
Jacksonville, Florida 32223

Re: DEP File No. PA 88-24, PSD-FL-137
Cedar Bay Generating Plant

Dear Mr. Walker:

Enclosed is one copy of the Draft PSD permit modification for the Cedar Bay Generating Plant located at 9640 East Port Road, Jacksonville, Duval County. The Technical Evaluation Preliminary Determination and Draft Revised BACT Determination, the Department's Intent to Issue PSD Permit Modification and the Public Notice of Intent to Issue PSD Permit Modification are also included.

The Public Notice of Intent to Issue PSD Permit Modification must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin at 850/921-9530.

Sincerely,

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

CHF/mph

Enclosures

In the Matter of an
Application for Permit by:

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

DEP File No. PA 88-24
Permit PSD-FL-137
Duval County

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification (copy of Draft permit modification attached) for the proposed action, detailed in the application specified above and the enclosed Technical Evaluation Preliminary Determination and Draft Revised BACT Determination for the reasons stated below.

The applicant, Cedar Bay Generating Company, L.P., applied on March 22, 1999, to the Department for a PSD permit modification for its Cedar Bay Generating Plant located in Jacksonville, Duval County. The modification is to allow the three fluidized bed circulating boilers (A, B and C) to operate with changes to its method of compliance for startup and shutdown, SO_2 emissions, mercury testing, heat input and stack testing methodology.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD permit modification is required to make changes to methods of compliance.

The Department intends to issue this PSD permit modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, 62-297, F.A.C. and 40CFR 52.21.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue PSD Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of thirty days from the date of publication of Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue PSD Permit Modification (including the Public Notice of Intent to Issue PSD Permit Modification, Technical Evaluation Preliminary Determination and Draft Revised BACT Determination, and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12-8-99 to the person(s) listed:

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

Clerk Stamp

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

Kni Johan (Clerk) 12-8-99 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PA 88-24, PSD-FL-137

Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant
Duval County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification for the Cedar Bay Generating Plant located in Duval County. The applicant's mailing address is: 9640 East Port Road, Jacksonville, Florida 32226. A Best Available Control Technology (BACT) Determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD).

This is an existing facility consisting 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. 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. These units have a Title V permit (0310337-002-AV) issued by the State of Florida.

The applicant proposes six changes to its current PSD permit. These changes are itemized briefly as follows:

A) Startup and Shutdown Definition – allow for excess emissions of CO during specific operating modes identified as startup or shutdown
B) Method of compliance for SO_2 – allow for an increase in the 3-hour SO_2 emission rate
C) Heat Input – allow for operational flexibility between emissions units
D) Mercury Testing – request to delete this requirement
E) Test Methods – allow for Method 29 as the method of compliance with metals requirements
F) Short Fiber rejects – request to modify condition describing the burning of short fiber rejects generated by Seminole Kraft

No annual increases of regulated pollutants (past actual to future actual basis) will occur as a result of the modification and no other emission limit increases are requested.

The Department will issue the Final permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of 30 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

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

Dept. of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Dept. of Environmental Protection
Northeast District
Suite 200B, 7825 Baymeadows Way
Jacksonville, Florida 32256
Telephone: 904/448-4300

The complete project file includes the application, technical evaluations, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, or the Department's reviewing engineer for this project, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

TECHNICAL EVALUATION

PRELIMINARY DETERMINATION

AND

DRAFT REVISED BACT DETERMINATION

Cedar Bay Generating Company, L.P.

Cedar Bay Generating Plant

Duval County

DEP File No. PA 88-24

PSD-FL-137

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

December 6, 1999

TECHNICAL EVALUATION AND REVISED BACT DETERMINATION

1. GENERAL INFORMATION

1.1 APPLICANT NAME AND ADDRESS

Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant
9640 East Port Road
Jacksonville, Florida 32218

Authorized Representative: J.A. Walker, Environmental Manager

1.2 REVIEWING AND PROCESS SCHEDULE

March 22, 1999	Submitted permit application
May 24, 1999	Revised application received by Department
September 3, 1999	Department's request for additional information
November 15, 1999	Received response to request for additional information
November 15, 1999	Application complete

2. FACILITY INFORMATION

2.1 FACILITY LOCATION

The facility is located in Jacksonville, Duval County. The UTM coordinates are Zone 17; 441.08 km E; 3365.06 km N. This site is approximately 54 kilometers from the Okefenokee National Wildlife Refuge and 98 kilometers from the Wolf Island National Wildlife Refuge, Class I PSD Areas.

2.2 STANDARD INDUSTRIAL CLASSIFICATION CODES (SIC)

Industry Group No.	49	Electric, Gas and Sanitary Services
Industry No.	4911	Electric Services

2.3 FACILITY CATEGORY

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. 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.

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_X), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). This facility is a major source of hazardous air pollutants (HAPs).

3. PROJECT DESCRIPTION

This project addresses the following emissions unit(s):

Emissions Unit No.	Emissions unit Description
001	Pyroflow® Circulating Fluidized Bed (CFB) dry bottom boiler designated as "CFB Boiler A"
002	Pyroflow® Circulating Fluidized Bed (CFB) dry bottom boiler designated as "CFB Boiler B"
003	Pyroflow® Circulating Fluidized Bed (CFB) dry bottom boiler designated as "CFB Boiler C"

The applicant proposes six changes to its current PSD permit. These changes are itemized briefly as follows:

A) Startup and Shutdown Definition – allow for excess emissions of CO during specific operating modes identified as startup or shutdown

B) Method of compliance for SO_2 – allow for an increase in the 3-hour SO_2 emission rate

C) Heat Input – allow for operational flexibility between emissions units

D) Mercury Testing – request to delete this requirement

E) Test Methods – allow for Method 29 as the method of compliance with metals requirements

F) Short Fiber rejects – request to modify condition describing the burning of short fiber rejects generated by Seminole Kraft

4. DETAILS OF APPLICANT'S REQUEST

Each requested change will be discussed within this section, including a summary of the applicant's request.

A) Startup and Shutdown Definition

Cedar Bay desires to obtain a modification regarding provisions for CO excess emissions during the various startup conditions for the circulating bed (CFB) boilers. There are two typical startup scenarios: 1) cold startup, and 2) warm startup. A third startup scenario occurs following some outages due to refractory replacement during a boiler outage. Each of these and the potential excess emissions are described below.

Cold Startup

A cold startup occurs when the boiler has been shutdown long enough for the boiler internal components to cool down. With three CFB boilers, approximately 15 to 20 cold startups may occur per year. The cold startup involves firing distillate fuel oil up to 10 hours, and excess emissions may occur during this period. This length of time may be required in order to raise the bed temperature to the minimum temperature necessary to support coal combustion. During the cold startup period, the hourly emission rates of carbon monoxide (CO) in lb/MMBtu can range from 10 to 20 times the permitted 8-hour rolling average limit of 0.175 lb/MMBtu. Because the heat input during these conditions is relatively low, the CO emissions in lb/hr are approximately 1 to 3 times the 8-hour rolling average permit limit of 186 lb/hr. During these cold startups, emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_X) are well within permit limits.

Warm Startup

A warm startup occurs when the boiler has been shutdown, but not long enough for the boiler internal components to completely cool down. With three CFB boilers, approximately 20 to 30 warm startups may occur per year. The warm startup involves firing distillate fuel oil. The length of time required in order to raise the bed temperature to the minimum temperature necessary to support coal combustion is dependent upon the duration of boiler shutdown prior to startup. During the warm startup period, the hourly emission rates of CO in lb/MMBtu can range from 5 to 10 times the permitted 8-hour rolling average limit of 0.175 lb/MMBtu, and up to 3 occurrences of excess emissions above the 8-hour rolling average CO limit are possible. Because the heat input during these conditions is relatively low, the CO emissions in lb/hr are normally within the permit limit of 186 lb/hr. During these warm startup periods, emissions of SO_2 and NO_X are well within permit limits.

Refractory Replacement

Refractory curing occurs when portions of the refractory on a boiler are replaced during a boiler outage and is a required portion of the startup process following these outages. The new refractory must be cured at controlled temperatures by firing distillate oil for up to 24 hours. There may be up to a total of 4 to 6 refractory cures per year for the three CFB boilers. During this period, there is low heat input to the boiler and only No. 2 fuel oil is fired. As a result, the curing contributes to periods of excess CO emissions as high as 10-20 times the permit limit in lb/MMBtu and 2-3 times the lb/hr rate limit. It is normal operating procedure to transition from refractory cure to warm start-up to bring the boiler online. During the refractory cure, as in other startup modes, emissions of SO_2 and NO_X are well within permit limits.

B) Method of compliance for SO_2

Cedar Bay proposes a change to the 3-hour rolling average with no modification to the existing 12-month rolling average. All other SO_2 emission limitations would remain the same. The chief reason for this request is that the units are not capable of routinely meeting the 3-hour limit, but over a longer period the units are capable of meeting the current limit.

C) Heat Input

Cedar Bay requests that the total heat input limitation remain in effect for all three boilers but the individual limits be removed from the permit to allow this flexibility. No increases in emissions are otherwise requested as a part of this change.

D) Mercury Testing

The applicant requests that this requirement be removed from its PSD permit. The only ability that the facility has to control mercury is through the fuel quality and any baghouse removal, i.e. no specific mercury removal equipment is employed and no standard is used to evaluate such tests.

E) Test Methods

The applicant requests the ability to demonstrate compliance with the particulate (PM10) and metals requirements by method 29. Current permit requirements are individual methods currently itemized as Method 5 (or 17) for PM, Method 12 (Pb), Method 101A (Hg) and Method 104 (Be). Cost and time are stated as the chief reasons.

F) Short Fiber Rejects

The applicant requests that the PSD permit condition, which requires it to burn short fiber rejects (generated by Seminole Kraft, which is now Smurfit Stone Container), be modified. The applicant indicates that "after consultation with Smurfit Stone Container Corporation" it proposes specific language that is consistent with a SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998 between the two parties. The result of such a change would tend to reduce the applicant's permitted *requirement* to burn the rejects, but still allow for its use as a supplemental fuel, provided that certain requirements were met.

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-214, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in an area designated, in accordance with Rule 62-204.340, F.A.C., as attainment for all pollutants.

Rule 62-4.030, F.A.C., prohibits modification of any existing emissions unit without first receiving a permit. It further specifies that a permitted installation may only be modified in a manner that is consistent with the terms of such a permit. Rule 62-210.200, F.A.C., defines "modification" to mean generally a change that results in an increase in actual emissions of regulated air pollutants. Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C., also reiterate the requirement for construction permits. Not all of the items within the applicant's request have the potential to increase emissions and the Department believes that only items 4A), B) and C) have this ability. The emission units affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules.

5.1 STATE REGULATIONS

Chapter 62-4	Permits
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.200	Definitions
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-214	Requirements For Sources Subject To The Federal Acid Rain Program
Rule 62-296.320	General Pollutant Emission Limiting Standards

5.2 FEDERAL RULES

40 CFR 52.21	Prevention of Significant Deterioration of Air Quality
40 CFR 60	Applicable sections of Subpart A, General Requirements
40 CFR 72	Acid Rain Permits (applicable sections)
40 CFR 73	Allowances (applicable sections)
40 CFR 75	Monitoring (applicable sections including applicable appendices)
40 CFR 77	Acid Rain Program-Excess Emissions (future applicable requirements)

6. DISCUSSION OF RELEVANT ISSUES

As noted in Section 5, the Department has no reason to believe that those items requested above (noted as items 4D, E and F) have the ability to cause any change in regulated emissions at the facility. Accordingly, this discussion is limited to those items that have that ability (specifically items 4A, B and C) which are denoted individually below.

6.1 STARTUP AND SHUTDOWN DEFINITION

The applicant describes 3 cases where excess emissions of CO are requested. The applicant points out that no change in operation (from past history) is occurring or being requested; that the purpose of this action is to clarify those situations where excess emissions of CO do occur, as well as the magnitude and duration of each. For simplicity, these cases are summarized in tabular form along with their maximum potential CO emissions. Current permit limits for CO are 0.175 lb/MMBtu and 186 lb/hr.

CASE	CO EMISSION (LBS/HR)	CO EMISSION (LB/MMBTU)	MAX. NO./YR.	LENGTH (HOURS)	MAXIMUM PTE (TPY)
Cold Startup	558	3.5	20	10	55.8
Warm Startup	186	1.75	30	10	27.9
Refractory Replacement	558	3.5	6	24	40.2

As can be seen from the table above, the maximum cumulative CO emissions that the facility has the potential to emit during these operating modes can be as high as 123.9 TPY. However, on an incremental basis the annual emission increase may be compared to the permitted full load rate of 186 lb/hr. On this basis, the request results in an emission increase of 64 TPY over the original BACT.

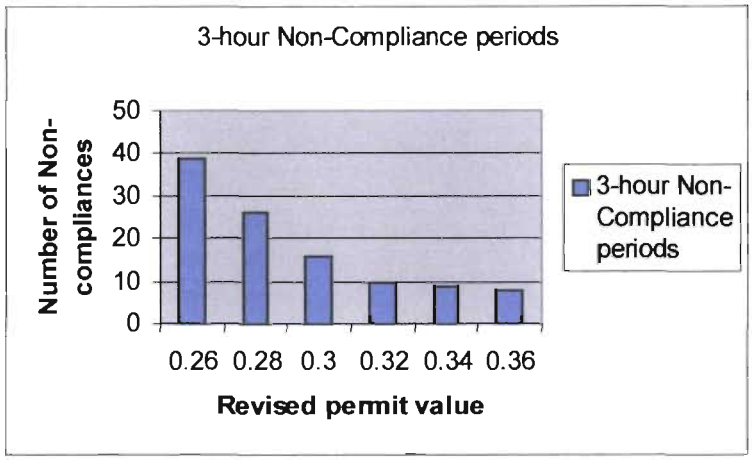
The Department notes that for each of these operating modes to be incurred, that a corresponding period of shutdown (i.e. no emissions) must have occurred, suggesting that the net annual PTE increase of CO is certainly closer to zero. This will form the basis of the Department's action.

6.2 METHOD OF COMPLIANCE FOR SO_2

The applicant has provided data, which shows that due to the normal variability of boiler operations, the current 3-hour SO_2 limit of 0.24 lb/MMBtu cannot be routinely achieved. Daily emission data was provided for the first 10 months of 1997 as well as the entire calendar year 1998 on all 3 boilers. These emission levels demonstrate a daily range of SO_2 emissions from 0.10 lb/MMBtu to 0.20 lb/MMBtu, with a mean of approximately 0.16 lb/MMBtu. The 12-month rolling average permitted rate is 0.20 lb/MMBtu. During this window, 72 exceedances of the 3-hour limit were observed with no exceedance of the 12-month rolling average. These exceedances are reported as required to the regulating agencies. The purpose of this action is to eliminate the potential for non-compliance within the current operating practices. Given that the applicant is not seeking an increase in the 12-month rolling average emission rate, no annual increase of SO_2 emissions can occur. However, some likelihood exists that the 3-hour SO_2 standard (NAAQS) could be adversely impacted and the Department requested that the applicant model the request.

Cedar Bay contracted with Golder Associates to perform the air modeling analyses in order to be certain that the requested increase causes no adverse impacts to the three-hour ambient air quality standard of 1300 $\mu g/m^3$ (State of Florida standard as well as National Standard). The results of the modeling indicate that Cedar Bay may operate with a 3-hour SO_2 limit of 0.40 lb/MMBtu (1277 lb/hr) and still demonstrate compliance with the applicable 3-hour average Ambient Air Quality Standards (AAQS). Although the modeling analysis does not show compliance with the 3-hour PSD Class I and II increments by all increment consuming and expanding sources in the vicinity of the facility, Cedar Bay does not contribute significantly to any predicted exceedances. Therefore, this request is permittable by Florida air permitting rules. As such, Cedar Bay proposes a 3-hour rolling average of 0.36 lb/MMBtu and 382 lb/hr for each boiler. No changes are proposed to the existing 12-month rolling average.

The chart below represents the basis for the Department's determination, incorporating an analysis of the data referred to above. One of the purposes of this chart is to demonstrate that some number of (past) non-compliance periods would have occurred even if the applicant's requested limit of 0.36 lb/MMBtu had existed. The purpose of



the request as well as the Department's action should be to provide for a limit, which satisfactorily allows common cause process variability to occur. The limit should not be so high as to incorporate special causes of process failure to occur and be "covered up". Accordingly, the Department concludes that a 3-hour limit of 0.30 lb/MMBtu should be adequate to allow these common causes to occur. Periods of non-compliance beyond this carry a more unusual connotation and should be reported and adequately addressed by the applicant.
It is noted that the Department recently issued a construction permit for a fluidized bed boiler (PSD-FL-265). In that permit, the SO_2 limits were set at 0.20 lb/MMBtu on a 24-hour block average (with no 3-hour limit). Therefore, although the Department will allow for an increase in the applicant's request to increase the 3-hour limit, it will additionally require that the 12-month rolling average be reduced to a 30-day rolling average with the same (0.20 lb/MMBtu) value.

6.3 HEAT INPUT

Cedar Bay desires some operational flexibility with each individual boiler due to the parallel boiler configuration and concurrent steam demands. Additionally, each boiler (although built to the same specifications) has it's own idiosyncrasies. Cedar Bay requests that the total heat input limitation remain in effect for all three boilers but the individual limits be removed from the permit to allow this flexibility. In addition, Cedar Bay is requesting that the same permit note that is present in the Title V permit be added to the PSD permit. The applicant once again notes that no change in operation is requested, nor will emission changes result. Given that the combined (three boiler) heat input will not change from permitted values, the Department has no reason to expect any emission increases to result. The Department will provide permit language, which allows for the requested flexibility within prescribed limits. However, the Department intends to provide a limit on this flexibility by imposing the requirement that no individual boiler may exceed its rated heat input of 1063 MMBtu/hr by 10%.

6.4 DEPARTMENT DETERMINATION

The Department has determined that each of the applicant's requested items can be accommodated in some fashion. A summary of the Department's determination is as follows:

REQUEST	DEPARTMENT DETERMINATION
Startup and Shutdown Definition (CO)	Warm startup – emissions up to 186 lb/hr without lb/MMBtu limit Cold startup – up to 10 hours (per cold startup) of CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation Refractory Curing – Must notify agency at least 24 hours prior to commencing; CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation Annual CO cap – CO emissions shall be limited to 758 TPY per boiler
Method of compliance for SO_2	Increase the 3-hour limit to 0.30 lb/MMBtu. Decrease the 0.20 lb/MMBtu 12-month rolling average to a 30-day rolling average.
Heat Input	The 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 No individual boiler shall operate at a heat input greater than 110% of 1063 MMBtu/hr (1169 MMBtu/hr).
Mercury Testing	The pertinent permit condition may be removed with no PSD implications. Should a change in fuel quality or particulate removal system/subsystem occur, the Department may require mercury testing to be reimplemeted.
Test Methods	The pertinent permit condition may be modified with no PSD implications.
Short Fiber Rejects	The pertinent permit condition may be modified with no PSD implications.

6.5 ADDITIONAL COMPLIANCE PROCEDURE

Pollutant	Compliance Procedure
CO (12-month rolling average)	CO CEMS data used for compliance with 758 TPY boiler cap

7. SOURCE IMPACT ANALYSIS

An ambient air quality impact assessment was done in support of the original PSD application dated 01/19/90. As mentioned in section 6.2, additional modeling to determine compliance with the 3-hour SO_2 AAQS and the 3-hour SO_2 PSD increments was done for this request. This additional modeling demonstrates compliance with the 3-hour SO_2 AAQS, but does not show by compliance by all increment consuming sources in the vicinity with the 3-hour SO_2 PSD Class I and Class II increments. However Cedar Bay's contribution to any predicted exceedances is less than significant; therefore, this request is permittable by Florida air permitting rules.

8. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project as outlined by the Department's BACT Determination will comply with all applicable state and federal air pollution regulations.

January xx, 2000

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

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

The applicant, Cedar Bay Generating Company, L.P., applied on March 22, 1999, to the Department for a modification to PSD permit number PSD-FL-137 for its Cedar Bay Generating Plant located in Duval County. The modification is to allow the three fluidized bed circulating boilers (A, B and C) to operate with changes to its method of compliance for startup and shutdown, SO_2 emissions, mercury testing, heat input and stack testing methodology. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Specific Condition No. II.A.3:

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

	Emission Limitations			
Pollutant	lbs/MMBtu	lbs/hr.	TPY	TPY for 3 CFBs
CO[5]	0.175[1]	186[1]	~~758~~ 758[4]	2273
NOx	0.17[2]	180.7[2]	736.1	2208
SO_2	~~0.24~~[3] 0.30[3]	~~255.1~~[3] 318.9[3]	--	--
	~~0.20~~[4] 0.20[2]	--	866	2598
VOC	0.015	16.0	65	195
PM	0.018	19.1	78	234
PM_{10}	0.018	19.1	78	234
H_2SO_4 mist	4.66×10^{-4}	0.50	2.0	6.1
Fluorides	7.44×10^{-4}	0.79	3.2	9.7
Lead	6.03×10^{-5}	0.06	0.26	0.78
Mercury	2.89×10^{-5}	0.03	0.13	0.38
Beryllium	8.70×10^{-6}	0.01	0.04	0.11

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

1 Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour applies.
2 Thirty-day rolling average.
3 Three-hour rolling average.
4 Twelve-Month rolling average.
5 See Specific Condition II.A.9.e. for alternative CO emission limits during specific operating modes.

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

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

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

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

h. To the extent that it is consistent with Specific Condition No. II.A.1.b., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998, by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, L.P., and the following, CBCP ~~shall~~ may burn all or a portion of the short fiber rejects generated by SKC in processing recycled paper. Prior to burning the rejects as a supplemental fuel however, CBCP shall conduct a test burn to determine the effects of burning the rejects. ~~No less than~~ At least ninety (90) days prior to ~~completion of construction~~ any proposed test burn, CBCP shall submit a plan to the Department for conducting a 30-day test burn ~~within one year after initial compliance testing. That test burn shall be~~ designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Specific Condition No. II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify the Department and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to the Department and to the RESD within forty-five (45) days of completion of the test burn. The Department shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this condition.

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

c. ~~CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the Department, RESD and EPRI, CBC shall submit a mercury control test protocol to the Department for approval by December 1, 1993. Results of the test shall be submitted to the Department within 90 days of completion.~~ Mercury testing shall not be routinely required. However, should the Department have reason to believe that a change in mercury emissions has occurred (e.g. via a change in fuel quality, particulate removal equipment, etc.) mercury testing shall be required.

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

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

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

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

e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Specific Condition No. II.A.11., herein, which exceeds the applicable emission limit in Specific Condition No. II.A.3 with the following exceptions. For the specific periods defined below, the emission limits of Carbon Monoxide (CO) shall be as follows:

Warm startup – emissions up to 186 lb/hr (no lb/MMBtu limit) with sufficient documentation
Cold startup – up to 10 hours (per cold startup) of CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation
Refractory Curing – Must notify agency at least 24 hours prior to commencing; CO data may be eliminated from the data used to determine compliance with the 8-hour rolling average limit with sufficient documentation

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

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

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

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

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

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

Clerk Stamp

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

(Clerk) (Date)

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

a) Have access to and copy and records that must be kept under the conditions of the permit;
b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

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

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

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

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

G.13 This permit also constitutes:

a) Determination of Best Available Control Technology (X)
b) Determination of Prevention of Significant Deterioration (X); and
c) Compliance with New Source Performance Standards (X).

G.14 The permittee shall comply with the following:

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

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

c) Records of monitoring information shall include:

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

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

Florida Department of Environmental Protection

Memorandum

TO: Clair Fancy

THRU: Al Linero 12/7

FROM: Michael P. Halpin

DATE: December 6, 1999

SUBJECT: Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant PSD Permit modifications
DEP File No. PP 88-24 (PSD-FL-137)

Attached is the public notice package for Cedar Bay Generating Plant permit modifications, which are being requested through the Power Plant Siting Office. This is an existing facility consisting 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. 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. These units have a Title V permit (0310337-002-AV) issued by the State of Florida.

The applicant proposes six changes to its current PSD permit. These changes are itemized briefly as follows:

A) Startup and Shutdown Definition – allow for excess emissions of CO during specific operating modes identified as startup or shutdown
B) Method of compliance for SO_2 – allow for an increase in the 3-hour SO_2 emission rate
C) Heat Input – allow for operational flexibility between emissions units
D) Mercury Testing – request to delete this requirement
E) Test Methods – allow for Method 29 as the method of compliance with metals requirements
F) Short Fiber rejects – request to modify condition describing the burning of short fiber rejects generated by Seminole Kraft

Items A) through C) above would have the potential to increase the annual emissions of regulated pollutants, however as a result of our recommendations, no annual increases of regulated pollutants will occur. These recommendations include:

1) Placement of an annual (12-month rolling average) CO limit based upon the original BACT while granting specific excess emissions during startup and shutdown (the excess emissions are included in the limit)
2) A change from the 12-month rolling average SO_2 limit of 0.20 lb/MMBtu to a 30-day rolling average, along with an increase in the 3-hour rate from 0.24 to 0.30 lb/MMBtu and
3) A limit on the combined heat input of the three boilers (based upon the original BACT) while granting an individual boiler limit of 110% of the currently permitted rate.

Accordingly, I recommend your approval of the attached Intent to Issue.

AAL/mph

Attachments

P.E. Certification Statement

Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant
Duval County

DEP File No.: PA 88-24 (PSD-FL-137)
Facility ID No.: 0310337

Project: PSD Permit Modification

I HEREBY CERTIFY that the engineering features described in the above referenced application and related additional information submittals, if any, and subject to the proposed permit conditions, provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

Cleve Holladay and I conducted this review.

(Seal)

Michael P. Halpin, P.E.
Registration Number: 31970

12/6/99
Date

Permitting Authority:
Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114
Fax: 850/922-6979

PG&E Generating ™
Cedar Bay Generating Plant
Owner: Cedar Bay Generating Company Limited Partnership

P.O. Box 26324
Jacksonville, FL 32226

904.751.4000
Fax: 904.751.7320
Internet: www.gen.pge.com

December 28, 1999

Mr. Michael Halpin, P.E.
Dept. of Environmental Protection
Division of Air Resource Management
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

Re: Cedar Bay Generating Plant, PSD-Fl-137

Dear Mr. Halpin:

Pursuant to the Department's letter dated December 8, 1999, please find the Affidavit of Publication from the Florida Times Union for Public Notice Of Intent To Issue PSD Permit Modification for the Cedar Bay Generating Plant. The notice was published on December 23, 1999. If there is any questions or additional documentation needed, please do not hesitate to contact me at (904) 751-4000 ext.22.

Sincerely,

Jeffrey A. Walker

Jeffrey A. Walker
Cedar Bay Environmental Manager

Cc: Randy Cole, Cedar Bay
PSD file

Enclosures

CC: NED

THE FLORIDA TIMES-UNION
Jacksonville, Fl
Affidavit of Publication CEDAR BAY GEN... CO., L.P.

Florida Times-Union

CEDAR BAY GENERATING CO.
PO BOX 26324
JACKSONVILLE FL 32236

REFERENCE: 0181153
R01580 Public NOtice of Int

State of Florida
County of Duval

Before the undersigned authority personally appeared Steven L. Smith who on oath says he is a Legal Advertising Representative of The Florida Times-Union, a daily newspaper published in Jacksonville in Duval County, Florida; that the attached copy of advertisement is a legal ad published in The Florida Times-Union. Affiant further says that The Florida Times-Union is a newspaper published in Jacksonville, in Duval County, Florida, and that the newspaper has heretofore been continuously published in Duval County, Florida each day, has been entered as second class mail matter at the post office in Jacksonville, in Duval County, Florida for a period of one year preceeding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

PUBLISHED ON: 12/23

FILED ON: 12/23/99

Name: Steven L. Smith Title: Legal Advertising Representative
In testimony whereof, I have hereunto set my hand and affixed my official seal, the day and year aforesaid.

NOTARY: Vera Janie Likens
Vera Janie Likens
Commission # CC 547806
Expires Jun. 1, 2000
Bonded Thru
Atlantic Bonding Co., Inc.

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No. PA 88-24, PSD-FL-137
Cedar Bay Generating Company, L.P.
Cedar Bay Generating Plant
Duval County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification for the Cedar Bay Generating Plant located in Duval County. The applicant's mailing address is: 9640 East Port Road, Jacksonville, Florida 32226. A Best Available Control Technology (BACT) Determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Determination (PSD).

This is an existing facility consisting 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. The fuel for Boilers B and C can also be supplemented with short fiber recycle relects received from Stone Container Corporation. No. 2 fuel oil is used as a supplemental fuel in all three boilers normally only for start-ups. These units have a Title V permit (0310337-002-AV) issued by the State of Florida.

The applicant proposes six changes to its PSD permit. These changes are itemized briefly as follows:

A) Startup and Shutdown Definition - allow for excess emissions of CO during specific operating modes ~~identified as~~ startup or shutdown
B) Method of compliance for SO_2 - allow for an increase in the 3-hour SO_2 emission rate
C) Heat Input - allow for operational flexibility between emissions units
D) Mercury Testing - request to delete this requirement
E) Test methods - allow for Method 29 as the method of compliance with metals requirements
F) Short fiber rejects - request to modify condition describing the burning of short fiber relects generated by Seminole kraft

No annual increases of regulated pollutants (past actual to future actual basis) will occur as a result of the modification and no other emission limit increases as requested.

The Department will issue the Final permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of 30 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitions for o hearing are set forth below.

Mediation is not available in this proceeding.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioners' substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

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

Dept. of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Dept. of Environmental Protection
Northeast District
Suite 200B, 7825 Baymeadows Way
Jacksonville, Florida 32256
Telephone: 904/448-4300

A complete project file includes the application, technical evaluations, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Sections 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, or the Department's reviewing engineer for this project, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

PG&E Generating ™
Cedar Bay Generating Plant
Owner: Cedar Bay Generating Company Limited Partnership

P.O. Box 26324
Jacksonville, FL 32226

904.751.4000
Fax: 904.751.7320
Internet: www.gen.pge.com

November 8, 1999

Mr. Michael Halpin, P.E.
Florida Department of Environmental Protection, Title V Section
Division of Air Resource Management
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

PA 88-24 PSD-FL-137

Dear Mr. Halpin:

Pursuant to your letter dated September 3, 1999 and in order to continue processing Cedar Bay's PSD Permit modification, we wish to submit the requested information on emission characteristics during start-up modes, provide modeling data that demonstrates Air Quality Impact Analysis of a requested 3-hour rolling average of Sox, clarify the plant's hourly heat input number, and re-affirm our understanding of the other PSD Modification requests.

History

- Cedar Bay submitted a PSD Modification request to the Department of Environmental Protection on March 22, 1999. The modifications to PSD permit conditions included the following:
  1. Startup/Shutdown definitions for Cedar Bay's Circulating Fluidized Bed Boilers to permit excess CO emission during these periods {Condition II.A.11.c.(2) and II.A.9.a}
  2. A request to replace the Sox 3-hour rolling average with a 24 hour block average {Condition II.A.3}
  3. A request to add Method 29 as a method for metals determination while conducting air compliance testing {Condition II. A.8.e.(5),(11),(15),(16)}
  4. A request to delete the reference in the PSD permit concerning Mercury Testing {Condition11.A.2.c.}
  5. A request to change the language concerning a test burn of short fiber rejects { Condition II.A.1.h.}
  6. A request to differentiate handling/usage rates of coal and aragonite undergoing unloading operations from other handling operations {Condition II.B.2}

- On May 20, 1999, Cedar Bay submitted a letter requesting changes and an addition to the original PSD Modification. They were as follows:
  1. Specify the correct reference in the PSD permit concerning the mercury testing requirement as the initial modification package referenced an incorrect Condition
  2. A submittal of new language relating to Cedar Bay's test burn of the short fiber rejects

3. A request to allow all (3) boilers collectively to comply with the 3189 MMBtu/hr heat input limit and have the appropriate method for compliance with the 3189 MMBtu/hr permit limit be calculated on a 24-hour block average {Condition II.A.1.c.}

- On September 3, 1999 you generated a letter requesting additional information concerning two items of the PSD modification. The requests included identifying specific emission characteristics related to start-up modes of Cedar Bay's boilers and for air modeling to estimate the short-term air quality impacts related to a 3-hour SO2 limit.

- Additional conversations with you via telephone have confirmed that the Department will not allow the heat input to be determined on a 24-hour block average, however, there did not appear to be a problem applying a total heat input limit of 3189 for all 3 boilers collectively.

SO_2 Limit

Pursuant to your request, Cedar Bay contracted with Golder Associates to perform the requisite air modeling (attached). The results of the modeling indicate that Cedar Bay may operate with a 3-hour SO2 limit of 0.40 lb/MMBtu(1,276.75lb/hr) and still demonstrate compliance with the applicable 3-hour average Ambient Air Quality Standards (AAQS) and PSD Class 1 and II increments. A statistical analysis of Cedar Bay's historical SO2 exceedance data indicates maximum values below the air model's emission limit of 0.40 lb/MMBtu. As such, Cedar Bay proposes a 3-hour rolling average of 0.36 lb/MMBtu and 382 lb/hr. for each boiler.

The PSD modification submitted in March requested the 3-hour rolling average be changed to a 24-hour block average of .22 MMBtu/233.8 lbs/hr. In light of the air modeling, Cedar Bay proposes a change to the 3-hour rolling average instead of a modification to a 24-hour block average. All other SO2 emission limitations would remain the same.

Proposed Language

Cedar Bay proposes to modify Condition No. II.A.3. for SO2 (other pollutants unchanged) as follows:

Pollutant	Lbs/MMBtu	Lbs/Hr	TPY	TPY for 3 CFB's
SO_2	~~0.24~~ 0.36[3]	~~255.1~~ 382.5[3]	------	--------
	0.20[4]	--	866	2598

(1) No change
(2) No change
(3) No change
(4) No change

Please note: Golder Associates has advised Cedar Bay that they have submitted an electronic copy of the modeling report to Mr. Cleve Holliday of the Air Monitoring Section of DEP.

Heat Input

As discussed in earlier correspondence, Cedar Bay desires some operational flexibility with each individual boiler due to our co-generation scenario of power supply and concurrent steam demands. Additionally, each boiler, although built to the same specifications, has it's own idiosyncrasies. Cedar Bay requests that the hourly limit of heat input apply collectively for all three boilers.

Finally, Cedar Bay is requesting that the same permit note that is present in the Title V permit is added to the PSD permit , for consistency.

Proposed Language

Cedar Bay proposes to modify Condition No. II.A.1.c. as follows:

The maximum combined total heat input into the CFB's shall not exceed 3189 MMBtu/hr. *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 rated capacity(or to limit future operation to 100 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.

Start-up and Shutdown Definitions

Cedar Bay desires to obtain a modification regarding provisions for CO excess emissions during the various startup conditions for the circulating bed (CFB) boilers. Below is the data requested that explains the magnitude, frequency, and duration of each mode of a CFB startup.

There are generally two startup scenarios: 1) cold startup, and 2) warm startup. A third startup scenario is refractory replacement during a boiler outage. Each of these and the potential excess emissions are described below.

Cold Startup
A cold startup occurs when the boiler has been shutdown long enough for the boiler internal components to cool down. With three CFB boilers, approximately 15 to 20 cold startups may occur per year. The cold startup involves firing distillate fuel oil up to 10 hours, and excess emissions may occur during this period. This length of time may be required in order to raise the bed temperature to the minimum temperature necessary to support coal combustion. During the cold startup period, the hourly emission rates of carbon monoxide (CO) in lb/MMBtu can range from 10 to 20 times the permitted 8-hour rolling average limit

of 0.175 lb/MMBtu. Because the heat input during these conditions is relatively low, the CO emissions in lb/hr are approximately 1 to 3 times the 8-hour rolling average permit limit of 186 lb/hr. During these cold startups, emissions of sulfur dioxide (SO2) and nitrogen oxides (NOx) are well within permit limits.

Warm Startup

A warm startup occurs when the boiler has been shutdown, but not long enough for the boiler internal components to completely cool down. With three CFB boilers, approximately 20 to 30 warm startups may occur per year. The warm startup involves firing distillate fuel oil. The length of time required in order to raise the bed temperature to the minimum temperature necessary to support coal combustion is dependent upon the duration of boiler shutdown prior to startup. During the warm startup period, the hourly emission rates of CO in lb/MMBtu can range from 5 to 10 times the permitted 8-hour rolling average limit of 0.175 lb/MMBtu, and up to 3 occurrences of excess emissions above the 8-hour rolling average CO limit are possible. Because the heat input during these conditions is relatively low, the CO emissions in lb/hr are normally within the permit limit of 186 lb/hr. During these warm startup periods, emissions of SO2 and NOx are well within permit limits.

Refractory Replacement

Refractory curing occurs when portions of the refractory on a boiler are replaced during a boiler outage. The new refractory must be cured at controlled temperatures by firing distillate oil for up to 24 hours. There may be up to a total of 4 to 6 refractory cures per year for the three CFB boilers. During this period, there is low heat input to the boiler and only No. 2 fuel oil is fired. As a result, the curing contributes to periods of excess CO emissions as high as 10-20 times the permit limit in lbs/MMBtu and 2-3 times the lb/hr rate limit. It is normal operating procedure to transition from refractory cure to warm start-up to bring the boiler online. During the refractory cure, as in other startup modes, emissions of SO2 and NOx are well within permit limits.

Specific Request

Cedar Bay requests that specific language is written into the PSD permit to allow CO excess emissions during these periods of startup/shutdown and refractory curing. Suggested language was provided in the PSD Modification submitted in March 1999.

Please advise if there is any other information needed or if you have any questions concerning Cedar Bay's PSD Modification request.

Sincerely,

Jeffrey A Walker

Jeffrey Walker
Environmental Manager

cc: Hamilton S. Oven, P.E., Administrator, Siting Coordination Office, FDEP
Michelle Golden, PG&E Generating, Bethesda

CC: NED Duval C. Holladay, BAR File

Rec'd in BAR
11/9/99 KH

REPORT ON

AIR QUALITY IMPACT ANALYSIS

CEDAR BAY GENERATING PLANT

Prepared For:

Cedar Bay Generating Company, L.P.
9640 East Port Road
Jacksonville, FL 32218

Prepared By:

Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

November 1999
9937587Y/F1

DISTRIBUTION:
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2 Copies - Golder Associates Inc.

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1.0 AIR QUALITY IMPACT ANALYSIS

1.1 INTRODUCTION

Cedar Bay Generating Plant (Cedar Bay) is requesting to increase the 3-hour average SO_2 emission limit for its three circulating fluidized-bed boilers (CFBs) from 0.24 to 0.36 lb/MMBtu (1,146 lb/hr). The following dispersion modeling analysis, demonstrating compliance with applicable 3-hour average Ambient Air Quality Standards (AAQS) and PSD Class I and II and increments, is presented in support of this request.

1.2 AIR MODELING ANALYSIS APPROACH

An air quality impact analysis of the Cedar Bay facility was conducted for SO_2. The air quality modeling analysis was performed using the Industrial Source Complex Short-Term (ISCST3) model, Version 99155, currently recommended for regulatory applications, to assess maximum ground-level impacts due to the Cedar Bay facility and other sources in the area. The analysis followed EPA and FDEP modeling guidelines for assessing compliance with the AAQS and PSD increments.

The impact analysis used screening and refinement phases to determine the maximum pollutant impacts associated with the Cedar Bay facility. The difference between the two modeling phases is the density of the receptor grid spacing used when predicting concentrations. Concentrations are predicted for the screening phase using a coarse (i.e., large spacing) receptor grid and a 5-year meteorological data record. In the screening analysis, the receptor grid consisted of a polar receptor grid with a 10-degree angular spacing between receptors.

Refinements of the maximum predicted concentrations from the screening phase are typically performed in the vicinity of the receptors of the screening receptor grid at which the highest predicted concentrations occurred over the 5-year period. Generally, if maximum concentrations predicted in another year are within 10 percent of the overall maximum concentration predicted for the 5-year period, then the other concentrations are refined as well. Modeling refinements are performed to determine maximum concentrations with a receptor grid spacing of 100 meters (m) or less.

The domain of a refined receptor grid will generally extend to all adjacent screening receptors surrounding a particular screening grid receptor. The air dispersion model is then executed with the refined grid for the entire year of meteorology during which the maximum concentration in the screening phase occurred. This approach is used to ensure that a valid maximum concentration is obtained.

Because the Cedar Bay facility is located approximately 54 km from the Okefenokee National Wildlife Refuge (ONWR) and 98 km from the Wolf Island National Wildlife Refuge (WINWR), both PSD Class I areas, a Class I increment analysis was performed.

A more detailed description of the model, along with the emission inventory, meteorological data, and screening receptor grids, is presented in the following sections.

1.3 AAQS AND PSD CLASS II INCREMENT ANALYSES

In general, when 5 years of meteorological data are used, the highest annual and the highest, second-highest (H2H) short-term concentrations are to be compared to the applicable AAQS and allowable PSD Class II increments. The H2H is calculated for a receptor field by:

1. Eliminating the highest concentration predicted at each receptor,
2. Identifying the second-highest concentration at each receptor, and
3. Selecting the highest concentration among these second-highest concentrations.

This approach is consistent with most air quality standards and all allowable PSD increments, which permit a short-term average concentration to be exceeded once per year at each receptor.

For the AAQS analysis, the Cedar Bay facility (at the requested SO_2 emission limit for the CFBs) was modeled together with background emission facilities. Additionally, a non-modeled background concentration is added to the maximum predicted air quality to determine a total air quality concentration. The maximum annual and H2H short-term total concentrations are compared to the AAQS.

For the PSD Class II increment analysis, the PSD increment consuming sources at the Cedar Bay facility were modeled with background PSD consuming or expanding sources. The maximum annual and H2H short-term PSD increment concentrations are compared to the allowable PSD Class II increments.

1.4 PSD CLASS I INCREMENT ANALYSIS

A detailed SO_2 PSD increment analysis was performed at the PSD Class I area. For the PSD Class I increment analysis, the PSD increment consuming sources at the Cedar Bay facility were modeled along with other background PSD consuming or expanding sources described in Section 1.7. The maximum annual and H2H short-term concentrations are compared to the allowable PSD Class I increments.

1.5 MODEL SELECTION

The ISCST3 dispersion model (Version 99155) was used to evaluate all pollutant impacts. This model is currently available on the EPA's Internet web site, Support Center for Regulatory Air Models (SCRAM), within the Technical Transfer Network (TTN). A listing of ISCST3 model features is presented in Table 1-1. The ISCST3 model is designed to calculate hourly concentrations based on hourly meteorological data (i.e., wind direction, wind speed, atmospheric stability, ambient temperature, and mixing heights). The ISCST3 model is applicable to sources located in either flat or rolling terrain where terrain heights do not exceed stack heights. These areas are referred to as simple terrain. The model can also be applied in areas where the terrain exceeds the stack heights. These areas are referred to as complex terrain.

Since the terrain surrounding the Cedar Bay facility is flat, the modeling analysis assumed that all receptors were at the base elevation of the facility (i.e., flat terrain assumption in ISCST3).

In this analysis, the EPA regulatory default options were used to predict all maximum impacts. The ISCST3 model can run in the rural or urban land use mode, which affects stability dispersion coefficients, wind speed profiles, and mixing heights. Land use can be characterized based on a scheme recommended by EPA (Auer, 1978). If more than

50 percent of the land use within a 3-km radius circle around a project is classified as industrial or commercial, or high-density residential, then the urban option should be selected. Otherwise, the rural option is appropriate. Based on reviews of aerial and U.S. Geological Survey (USGS) topographical maps, the land use within a 3-km (1.9-mile) radius of the Cedar Bay facility is considered to be mostly rural (i.e., very little heavy industrial, light-moderate industrial, commercial, or compact residential land use categories). Therefore, the rural mode was used in the air dispersion model to predict impacts from the Cedar Bay facility and other emission sources considered in the modeling analysis.

The ISCST3 model was used to predict maximum pollutant concentrations for the 3-hour averaging period. The predicted concentrations were then compared to allowable PSD increments and the AAQS.

1.6 METEOROLOGICAL DATA

Meteorological data used in the ISCST3 model to determine air quality impacts consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) offices located at the Jacksonville International Airport (JAX) and Waycross, GA, respectively. Concentrations were predicted using 5 years of hourly meteorological data from 1984 through 1988. The NWS office at JAX is the closest primary NWS to the study area. The JAX station meteorological data have been used for previous air modeling studies for sources in Duval County.

The surface observations included wind direction, wind speed, temperature, cloud cover, and cloud ceiling height. The wind speed, cloud cover, and cloud ceiling values were used in the ISCST3 meteorological preprocessor program to determine atmospheric stability using the Turner stability scheme. Based on the temperature measurements at morning and afternoon, mixing heights were calculated from the radiosonde data at Waycross, GA using the Holzworth approach (Holzworth, 1972). Hourly mixing heights were derived from the morning and afternoon mixing heights using the interpolation method developed by EPA (Holzworth, 1972). The hourly surface data and mixing heights were used to develop a sequential, hourly meteorological data set (i.e., wind direction, wind speed, temperature, stability, and mixing heights). Because the observed hourly wind directions at the NWS

stations are classified into one of thirty-six 10-degree sectors, the wind directions were randomized within each sector to account for the expected variability in air flow. These calculations were performed using the EPA RAMMET meteorological preprocessor program.

1.7 EMISSION INVENTORY

1.7.1 CEDAR BAY FACILITY

An emissions inventory of sources at the Cedar Bay facility is presented in Table 1-2. This emissions inventory reflects a 3-hour average SO_2 emission rate of 425.58 lb/hr per CFB based on the requested emission limit of 0.4 lb/MMBtu. Note that Cedar is requesting an SO_2 emission limit of only 0.36 lb/MMBtu.

1.7.2 OTHER EMISSION SOURCES

The emission inventories for other non-Cedar Bay facilities were developed mainly from databases used in recent air modeling studies of the Jacksonville area including Jacksonville Electric Authority's Northside Repowering Project, and the cluster rule compliance demonstration projects for Jefferson Smurfit Corporation (located in Fernadina Beach) and Georgia-Pacific Corporation (located in Palatka). For the AAQS and PSD Class II increment analysis, all major SO_2 sources located in Nassau and Duval Counties were included, as well as Gilman Paper in St. Mary's, Georgia. A summary of these facilities, their locations with respect to the Cedar Bay facility, and their SO_2 emission rates is presented in Table 1-3. The individual source emissions, stack, and operating parameters for the AAQS and PSD Class II modeling analyses are summarized in Table 1-4.

A PSD Class I increment modeling analysis was performed for SO_2. All sources that were considered in the Class I analysis are presented in Table 1-5. All PSD increment consuming or expanding sources within these facilities are included in the analysis, including Putnam County sources.

1.8 BUILDING DOWNWASH EFFECTS

Based on the building dimensions associated with buildings and structures at the plant, all stacks at the Cedar Bay facility comply with the good engineering practice (GEP) stack

height regulations. However, these stacks are less than GEP height. Therefore, the potential for building downwash to occur was considered in the air modeling analysis for these stacks.

Generally, a stack is considered to be within the influence of a building if it is within the lesser of 5 times L, where L is the lesser dimension of the building height or projected width. The ISCST3 model uses two procedures to address the effects of building downwash. For both methods, the direction-specific building dimensions are input for H_b and l_b for 36 radial directions, with each direction representing a 10-degree sector. The H_b is the building height and l_b is the lesser of the building height or projected width. For short stacks (i.e., physical stack height is less than $H_b + 0.5\, l_b$), the Schulman and Scire (1980) method is used. The features of the Schulman and Scire method are as follows:

1. Reduced plume rise as a result of initial plume dilution,
2. Enhanced plume spread as a linear function of the effective plume height, and
3. Specification of building dimensions as a function of wind direction.

For cases where the physical stack height is greater than $H_b + 0.5\, l_b$, but less than GEP, the Huber-Snyder (1976) method is used. Both downwash algorithms affect stacks that are within the influence of a building, without regard for the actual distance the stack or stack's plume is from the building during any given moment.

The building dimensions considered in the air modeling analysis for the Cedar Bay facility and adjacent Stone Container facility are presented in Table 1-6. The location of the buildings and stacks can be found on the site plot plan (Figure 1-1). Due to the proximity of the Stone Container facility to the Cedar Bay facility, structures from both facilities were considered in the building wake analysis. For the modeling analysis, direction-specific building dimensions are input for H_b and l_b for 36 radial directions, with each direction representing a 10-degree sector. All direction-specific building parameters were calculated with the Building Profile Input Program (BPIP), Version 95086. The BPIP program was used to generate building data for the ISCST3 model input.

1.9 RECEPTOR LOCATIONS

For predicting maximum concentrations in the vicinity of the Cedar Bay facility, an array of discrete polar receptors were used. The number of discrete receptors was 1,174, which included 36 receptors located along the property line of Cedar Bay facility and 1,138 additional offsite receptors located at distances of 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.25, 1.5, 1.75, 2.0, 2.5, 3.0, 3.5, 4.0 km and every kilometer to 20 km from the CFB stack location, the origin (i.e., 0,0) location for the air modeling analysis. A summary of the plant boundary receptors used in the modeling analysis is presented in Table 1-7.

Modeling refinements were performed, as required, by using a polar receptor grid with a maximum receptor spacing of 100 m in the radial direction and an angular spacing between radials of 1 or 2 degrees. Because the receptor distance is less than 100 m for receptors within a radial distance of less then 575 m, angular refinements within that distance are generally not required. However, resolution in the radial direction would be refined to 100 m.

SO_2 concentrations were also predicted at 10 discrete Cartesian receptors located along the southern and eastern boundaries of the ONWR PSD Class I Area, plus one additional receptor located at the WINWR. A listing of the 11 Class I receptors is presented in Table 1-8. Due to the distance from the Cedar Bay facility to the ONWR and WINWR, additional receptor refinements were not performed for these areas.

1.10 BACKGROUND CONCENTRATIONS

Total air quality impacts were predicted for the AAQS analysis by adding the maximum annual and highest, second-highest short-term concentrations due to all modeled sources to estimated background concentrations. Background concentrations are concentrations due to sources not explicitly included in the modeling analysis. These concentrations consist of two components:

- Impacts due to other non-modeled emission sources (i.e., point sources not explicitly included in the modeling inventory), and
- Natural and fugitive emission sources.

The non-modeled background concentrations were obtained from air quality monitoring data for Duval County (1998 ALLSUM) provided by FDEP. The maximum 3-hour average SO_2 concentration of 272 $\mu g/m^3$ was selected for use as the background concentration, based on the following 1998 ALLSUM report information for SO_2 monitors located in Duval county.

Summary of 1998 3-Hour Average SO_2 ALLSUM Report Data for Monitors Located in Duval County

Site ID No.	Address	Highest 3-Hour Average SO_2 Concentration ($\mu g/m^3$)
12-031-0032	2900 Bennet Street	259
12-031-0080	LaSalle Street	131
12-031-0081	840 Cedar Bay Road	272
12-031-0097	6241 Fort Caroline Road	220

The use of a 3-hour average SO_2 background concentration of 272 $\mu g/m^3$ is conservative (results in higher concentrations) because the SO_2 monitor on Cedar Bay Road is likely impacted by sources considered in the modeling analysis.

Table 1-1. Major Features of the ISCST3 Model

ISCST3 Model Features
• Polar or Cartesian coordinate systems for receptor locations
• Rural or one of three urban options which affect wind speed profile exponent, dispersion rates, and mixing height calculations
• Plume rise due to momentum and buoyancy as a function of downwind distance for stack emissions (Briggs, 1969, 1971, 1972, and 1975; Bowers, et al., 1979).
• Procedures suggested by Huber and Snyder (1976); Huber (1977); and Schulman and Scire (1980) for evaluating building wake effects
• Procedures suggested by Briggs (1974) for evaluating stack-tip downwash
• Separation of multiple emission sources
• Consideration of the effects of gravitational settling and dry deposition on ambient particulate concentrations
• Capability of simulating point, line, volume, area, and open pit sources
• Capability to calculate dry and wet deposition, including both gaseous and particulate precipitation scavenging for wet deposition
• Variation of wind speed with height (wind speed-profile exponent law)
• Concentration estimates for 1-hour to annual average times
• Terrain-adjustment procedures for elevated terrain including a terrain truncation algorithm for ISCST3; a built-in algorithm for predicting concentrations in complex terrain
• Consideration of time-dependent exponential decay of pollutants
• The method of Pasquill (1976) to account for buoyancy-induced dispersion
• A regulatory default option to set various model options and parameters to EPA recommended values (see text for regulatory options used)
• Procedure for calm-wind processing including setting wind speeds less than 1 m/s to 1 m/s.

Note: ISCST3 = Industrial Source Complex Short-Term.
Source: EPA, 1998.

Table 1-2. Inventory of SO_2 Sources at the Cedar Bay Facility

Source Description	ISCST3 ID Name	Stack Parameters								Emission Rate		PSD Source? (EXP/CON)
		Height		Diameter		Temperature		Velocity				
		(ft)	(m)	(ft)	(m)	(°F)	(K)	(ft/s)	(m/s)	(lb/hr)	(g/s)	
Three Circulating Fluidized Bed Boilers	CFB123	403	122.8	13.3	4.05	131	328	120.4	36.70	1276.7	160.87	CON
Two Limestone Dryers	CBDRYER	63	19.2	4.3	1.30	82	301	93.2	28.40	0.48	0.06	CON

Table 1-3. Summary of SO_2 Emitting Facilities Considered in the Air Modeling Analysis

Facility	UTM Coordinates East (km)	UTM Coordinates North (km)	Location[a] X (km)	Location[a] Y (km)	Location[a] Distance (km)	Location[a] Direction (deg)	SO_2 Emission Rate (TPY)	Q Emissions Threshold [(D-SIA)x20]	Included in AAQS Modeling Analysis?	Included in PSD Class II Modeling Analysis?	Included in PSD Class I Modeling Analysis?
Stone Container Corp.	441.8	3365.6	0.2	0.1	0.2	72	111	SIA	Yes	Yes	Yes
Anheiser Busch, Inc	440.6	3366.8	-1.0	1.3	1.6	321	2,636	SIA	Yes	Yes	Yes
Georgia Pacific	440.1	3368.3	-1.5	2.8	3.1	331	207	SIA	Yes	No[d]	No[d]
JEA - Northside Power Plant	446.9	3364.8	5.3	-0.7	5.3	98	113,776	SIA	Yes	Yes	Yes
JEA - St. Johns River Power Park	447.1	3366.7	5.5	1.2	5.6	78	64,592	SIA	Yes	Yes	Yes
JEA - Kennedy Power Plant	440.0	3359.2	-1.6	-6.3	6.5	194	9,039	SIA	Yes	Yes	Yes
Millenium Specialty Products	435.6	3360.7	-6.0	-4.8	7.7	231	139	SIA	Yes	Yes	Yes
J. W. Swisher	437.9	3357.9	-3.7	-7.6	8.5	206	292	SIA	Yes	No[d]	No[d]
ES Metals	431.8	3358.3	-9.8	-7.2	12.2	234	-838	SIA	Yes	Yes	Yes
JEA - Southside Power Plant	437.7	3353.9	-3.9	-11.6	12.3	199	11,063	SIA	Yes	No[d]	No[d]
Gulf Life Insurance	436.2	3354.1	-5.4	-11.4	12.7	205	103	SIA	Yes	No[d]	No[d]
Anchor Glass Container Co.	431.3	3357.5	-10.3	-8.0	13.1	232	448	SIA	Yes	No[d]	No[d]
Duval Asphalt Products	428.7	3361.4	-12.9	-4.1	13.6	252	1,270	SIA	Yes	No[d]	No[d]
Maxwell House	439.7	3350.0	-1.9	-15.5	15.7	187	399	SIA	Yes	Yes	Yes
Bush Boake Allen, Inc.	427.6	3357.3	-14.0	-8.2	16.3	240	504	SIA	Yes	No[d]	No[d]
U.S. Naval Station- Mayport	460.4	3362.8	18.8	-2.7	19.0	98	924	SIA	Yes	No[d]	No[d]
Duval Asphalt Products	443.2	3344.0	1.6	-21.5	21.6	176	384	52	Yes	No[d]	No[d]
Rayonier, Inc.	454.7	3392.2	13.1	26.7	29.7	26	7,451	214	Yes	Yes	Yes
Jefferson Smurfit Corp.	456.2	3394.2	14.6	28.7	32.2	27	18,651	263	Yes	Yes	Yes
Gilman Paper Co. St. Mary's GA	448.2	3401.3	6.6	35.8	36.4	10	7,271	347	Yes	Yes	Yes
Seminole Power Plant	438.8	3289.2	-2.8	-76.3	76.4	182	75,392	1,148	No[c]	No[c]	Yes
Georgia-Pacific Palatka	434.0	3283.4	-7.6	-82.1	82.5	185	14,315	1,270	No[c]	No[c]	Yes
FPL Palatka Power Plant	442.8	3277.6	1.2	-87.9	87.9	179	-12,890	1,379	No[c]	No[c]	Yes
FPL Putnam Power Plant	443.3	3277.6	1.7	-87.9	88.0	179	13,550	1,379	No[c]	No[c]	Yes

Footnotes:

[a] Relative to the location of Cedar Bay Cogeneration, Inc. which is located at the following UTM Coordinates:

East (km) 441.6
North (km) 3365.5

[b] The significant impact area (SIA) equals 19.0 km

[c] Beyond 50 km from the SIA and therefore not included in the AAQS and PSD Class II modeling analysis.

[d] These facilities do no have increment consuming or increment expanding sources and were therefore not included in the modeling analysis for PSD increments.

Table 1-4. Inventory of SO_2 Sources Included in the AAQS and PSD Class II Air Modeling Analyses

Facility / Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)	Modeled in: AAQS	Class II
Stone Container Corp									
Package Boilers 1-3 Future	SKCPAC13	61.0	2.44	447	16.18	3.20	CON	Yes	Yes
PBs 1-3 1974 Baseline	SCCPB13	32.3	1.83	433	20.12	-200.00	EXP	No	Yes
BB1-2 1974 Baseline	SCCB12	41.5	2.44	329	13.72	-114.00	EXP	No	Yes
Anheiser Busch, Inc									
Duct Burner, Heat Rec. Boiler, Biogas Flare	ABUSCHC	6.1	0.60	811	1.80	2.14	CON	Yes	Yes
Boiler Nos. 1 through 4	ABUSCHB	30.5	1.10	483	17.40	73.76		Yes	No
Georgia-Pacific Co.									
Boiler No. 1	GPBLR1	11.6	0.61	477	9.14	2.58		Yes	No
Boiler No. 2	GPBLR2	4.9	0.61	505	6.40	3.36		Yes	No
JEA - Northside Power Plant									
Repowered Units 1&2	JEANS12	151.0	4.57	331	19.20	139.42	CON	Yes	Yes
Unit 1 1974 Baseline	JEANS1B	76.2	4.87	403	23.10	-690.92	EXP	No	Yes
Unit 2 1974 Baseline	JEANS2B	88.4	5.00	394	13.10	-584.55	EXP	No	Yes
Unit 3	JEANS3	106.7	4.72	425	40.38	1257.00		Yes	No
CT 3, 4, 5 and 6	JEANSCTS	9.8	5.84	700	8.80	19.56		Yes	No
JEA - St. Johns River Power Park									
Unit Nos. 1 & 2	SJRPP12	195.1	6.79	342	27.40	1859.60	CON	Yes	Yes
JEA - Kennedy Power Plant									
Unit 9	JEAKEN9	45.7	3.20	398	10.10	75.05		Yes	No
Unit 10	JEAKEN10	41.5	2.70	411	27.40	185.19		Yes	No
Unit 8 1974 Baseline	JEAKEN8B	45.7	3.20	394	10.40	-75.05	EXP	No	Yes
Millenium Specialty Products									
Future	MILLENMF	13.7	1.22	450	5.50	4.01	CON	Yes	Yes
1974 Baseline	MILLENMB	12.2	1.10	658	10.10	-8.49	EXP	No	Yes
J. W. Swisher									
Boilers Nos. 1 through 3	JWS1	18.3	1.22	505	0.61	4.26			
Boiler Nos. 4 through 6	JWS2	9.1	0.30	477	7.01	4.21			
ES Metals									
Unit ID No. 02	ESM2	25.6	0.91	325	15.24	-18.77	EXP	No	Yes
Unit ID No. 03	ESM3	24.4	1.22	355	3.96	-5.38	EXP	No	Yes
JEA - Southside Power Plant									
No. 4 Steam Generator	JEASS4	43.9	3.40	425	11.90	110.42		Yes	No
No. 5 Steam Generator	JEASS5	44.2	3.00	418	26.80	208.08		Yes	No
Anchor Glass Container									
No. 1 Glass Melting Furnace	AGCGMF1	17.4	0.90	511	19.50	1.37		Yes	No
No. 2 Glass Melting Furnace	AGCGMF2	17.4	0.80	522	14.00	2.74		Yes	No
No. 3 Glass Melting Furnace	AGCGMF3	33.2	1.70	430	11.60	5.05		Yes	No
No. 4 Glass Melting Furnace	AGCGMF4	35.7	1.60	511	11.90	3.75		Yes	No

Table 1-4. Inventory of SO_2 Sources Included in the AAQS and PSD Class II Air Modeling Analyses

Facility / Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)	Modeled in: AAQS	Class II
Duval Asphalt Products									
Asphalt Batch Plant	DAP	11.6	0.98	376	31.09	36.54		Yes	No
Maxwell House									
Boiler No. 1	MH1	45.7	0.98	607	0.61	3.96		Yes	No
Boiler No. 2	MH2	45.7	0.43	397	67.97	7.52		Yes	No
Boiler No. 2 (Retired)	MH2RET	15.2	0.91	402	20.73	-2.44	EXP	No	Yes
Bush Boake Allen, Inc.									
Boiler No. 2	BBABLR2	15.5	1.20	586	0.90	7.20		Yes	No
Myrcene Unit D	BBAMYCD	7.9	0.20	700	14.00	0.03		Yes	No
Boiler No. 3	BBABLR3	20.1	1.20	586	11.60	7.17		Yes	No
Myrcene Unit A	BBAMYCA	18.3	0.90	539	1.20	0.13		Yes	No
U.S. Naval Station- Mayport									
Building 1241 Boilers 1, 2, 3	USNM1241	12.2	0.90	544	14.30	15.81		Yes	No
Building 250 Boilers 1, 2	USNM250	14.0	1.20	561	7.90	10.11		Yes	No
Building 338 Boilers 87 & 88	USNM338	7.6	0.30	472	4.30	0.26		Yes	No
Building 1488 Boiler	USNM1488	18.3	0.30	450	13.70	0.43		Yes	No
Duval Asphalt Products									
Asphalt Batch Plant	DAP1	11.6	0.98	376	31.09	11.06		Yes	No
Rayonier, Inc.									
PB 1-3	RAYPB13	54.9	3.00	336	9.80	165.90	CON	Yes	Yes
RB	RAYRB	76.2	2.29	325	17.37	40.60		Yes	No
Vent Scrubber	RAYVENT	37.5	0.91	328	20.12	8.00		Yes	No
PB 1-3 PSD Baseline	RAYPB13b	37.2	3.00	336	9.80	-165.90	EXP	No	Yes
Jefferson Smurfit									
Recovery Boiler No. 5	JSRB5	87.8	2.74	484	18.96	31.20	CON	Yes	Yes
Recovery Boiler No. 4	JSRB4	75.9	3.75	511	17.96	35.10	CON	Yes	Yes
Power Boiler No. 5	JSPB5	78.3	3.35	498	18.17	311.03	CON	Yes	Yes
Power Boiler No. 7	JSPB7	103.6	4.51	470	13.44	154.38	CON	Yes	Yes
Lime Kiln No. 4	JSLK4	30.8	0.94	450	48.59	3.38	CON	Yes	Yes
Smelt Dissolving Tank No. 4	JSSDT4	75.9	1.83	340	18.17	0.87	CON	Yes	Yes
Smelt Dissolving Tank No. 5	JSSDT5	87.8	1.22	345	13.44	0.99	CON	Yes	Yes
Recovery Boiler No. 4	JSRB4B	75.9	2.74	493	18.78	-35.10	EXP	No	Yes
Power Boiler No. 5	JSPB5B	69.2	3.35	480	16.25	-170.00	EXP	No	Yes
Smelt Dissolving Tank No. 4	JSSDT4B	69.5	1.83	350	5.21	-0.71	EXP	No	Yes
Power Boiler Nos. 3 and 4	JSPB34B	69.2	2.44	483	16.86	-144.70	EXP	No	Yes
Lime Kiln No. 2	JSLK2B	13.4	1.07	361	12.25	-1.25	EXP	No	Yes
Lime Kiln No. 3	JSLK3B	13.4	1.37	360	17.59	-1.25	EXP	No	Yes
Recovery Boiler No. 3	JSRB3B	40.8	2.74	390	13.26	-10.50	EXP	No	Yes
Smelt Dissolving Tank No. 3	JSSDT3B	33.2	0.61	360	5.82	-0.21	EXP	No	Yes
Gilman Paper Co. St. Mary's, GA									
PB3 Future	GILPB3	83.8	4.30	450	2.82	87.29	CON	Yes	Yes
Combination Boiler Future	GILCOBLR	45.7	3.05	326	7.76	88.75	CON	Yes	Yes

Table 1-4. Inventory of SO_2 Sources Included in the AAQS and PSD Class II Air Modeling Analyses

Facility	Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)	Modeled in: AAQS	Class II
	RBs 2 & 3 Future	GILRB23	54.9	2.13	425	16.76	15.20	CON	Yes	Yes
	RB4 Future	GILRB4	76.2	2.59	411	12.19	15.80	CON	Yes	Yes
	Lime Kiln Future	GILLK	30.5	1.52	350	11.64	2.13	CON	Yes	Yes
	PB1 1974 Baseline	GILPB13b	83.8	4.30	450	7.30	-281.00	EXP	No	Yes
	PB4 1974 Baseline	GILPB4b	36.6	1.80	700	20.00	-59.90	EXP	No	Yes
	RB2 1974 Baseline	GILRB2b	47.2	2.30	426	13.10	-7.60	EXP	No	Yes
	RB3 1974 Baseline	GILRB3b	53.3	1.60	394	25.20	-7.60	EXP	No	Yes
	RB4 1974 Baseline	GILRB4b	76.2	2.60	427	22.10	-15.80	EXP	No	Yes

Table 1-5. Inventory of SO_2 Sources Included in the PSD Class I Air Modeling Analyses

Facility / Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)
Stone Container Corp							
Package Boilers 1-3 Future	SKCPAC13	61.0	2.44	447	16.18	3.20	CON
PBs 1-3 1974 Baseline	SCCPB13	32.3	1.83	433	20.12	-200.00	EXP
BB1-2 1974 Baseline	SCCBB12	41.5	2.44	329	13.72	-114.00	EXP
Anheiser Busch, Inc							
Duct Burner, Heat Rec. Boiler, Biogas Flare	ABUSCHC	6.1	0.60	811	1.80	2.14	CON
JEA - Northside Power Plant							
Repowered Units 1&2	JEANS12	151.0	4.57	331	19.20	139.42	CON
Unit 1 1974 Baseline	JEANS1B	76.2	4.87	403	23.10	-690.92	EXP
Unit 2 1974 Baseline	JEANS2B	88.4	5.00	394	13.10	-584.55	EXP
JEA - St. Johns River Power Park							
Unit Nos. 1 & 2	SJRPP12	195.1	6.79	342	27.40	1859.60	CON
JEA - Kennedy Power Plant							
Unit 8 1974 Baseline	JEAKEN8B	45.7	3.20	394	10.40	-75.05	EXP
Millenium Specialty Products							
Future	MILLENMF	13.7	1.22	450	5.50	4.01	CON
1974 Baseline	MILLENMB	12.2	1.10	658	10.10	-8.49	EXP
ES Metals							
Unit ID No. 02	ESM2	25.6	0.91	325	15.24	-18.77	EXP
Unit ID No. 03	ESM3	24.4	1.22	355	3.96	-5.38	EXP
Maxwell House							
Boiler No. 2 (Retired)	MH2RET	15.2	0.91	402	20.73	-2.44	EXP
Rayonier, Inc.							
PB 1-3	RAYPB13	54.9	3.00	336	9.80	165.90	CON
PB 1-3 PSD Baseline	RAYPB13	37.2	3.00	336	9.80	-165.90	EXP
Jefferson Smurfit							
Recovery Boiler No. 5	JSRB5	87.8	2.74	484	18.96	31.20	CON
Recovery Boiler No. 4	JSRB4	75.9	3.75	511	17.96	35.10	CON
Power Boiler No. 5	JSPB5	78.3	3.35	498	18.17	311.03	CON
Power Boiler No. 7	JSPB7	103.6	4.51	470	13.44	154.38	CON
Lime Kiln No. 4	JSLK4	30.8	0.94	450	48.59	3.38	CON
Smelt Dissolving Tank No. 4	JSSDT4	75.9	1.83	340	18.17	0.87	CON
Smelt Dissolving Tank No. 5	JSSDT5	87.8	1.22	345	13.44	0.99	CON
Recovery Boiler No. 4	JSRB4B	75.9	2.74	493	18.78	-35.10	EXP

Table 1-5. Inventory of SO_2 Sources Included in the PSD Class I Air Modeling Analyses

Facility	Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)
	Power Boiler No. 5	JSPB5B	69.2	3.35	480	16.25	-170.00	EXP
	Smelt Dissolving Tank No. 4	JSSDT4B	69.5	1.83	350	5.21	-0.71	EXP
	Power Boiler Nos. 3 and 4	JSPB34B	69.2	2.44	483	16.86	-144.70	EXP
	Lime Kiln No. 2	JSLK2B	13.4	1.07	361	12.25	-1.25	EXP
	Lime Kiln No. 3	JSLK3B	13.4	1.37	360	17.59	-1.25	EXP
	Recovery Boiler No. 3	JSRB3B	40.8	2.74	390	13.26	-10.50	EXP
	Smelt Dissolving Tank No. 3	JSSDT3B	33.2	0.61	360	5.82	-0.21	EXP
Gilman Paper Co. St. Mary's, GA								
	PB3 Future	GILPB3	83.8	4.30	450	2.82	87.29	CON
	Combination Boiler Future	GILCOBLR	45.7	3.05	326	7.76	88.75	CON
	RBs 2 & 3 Future	GILRB23	54.9	2.13	425	16.76	15.20	CON
	RB4 Future	GILRB4	76.2	2.59	411	12.19	15.80	CON
	Lime Kiln Future	GILLK	30.5	1.52	350	11.64	2.13	CON
	PB1 1974 Baseline	GILPB13b	83.8	4.30	450	7.30	-281.00	EXP
	PB4 1974 Baseline	GILPB4b	36.6	1.80	700	20.00	-59.90	EXP
	RB2 1974 Baseline	GILRB2b	47.2	2.30	426	13.10	-7.60	EXP
	RB3 1974 Baseline	GILRB3b	53.3	1.60	394	25.20	-7.60	EXP
	RB4 1974 Baseline	GILRB4b	76.2	2.60	427	22.10	-15.80	EXP
Seminole Power Plant								
	Units 1 and 2	SEMELECT	205.7	10.97	327	7.99	2168.80	CON
Florida Power & Light - Putnam								
	2x70Mw CT/HRSG + DB	FPLPUTNM	22.3	3.15	437	58.60	194.90	CON
Florida Power & Light - Palatka								
	Unit 2	FPLPALAT	45.7	3.96	408	9.50	-257.03	EXP
Georgia-Pacific Corporation - Palatka								
	Recovery Boiler No 4	GPPLRB4	70.1	3.66	478	19.42	13.85	CON
	Smelt Dissolving Tank No. 4	GPPLSDT4	62.8	1.52	344	6.46	1.00	CON
	Lime Kiln No. 4	GPPLLK4	39.9	1.35	339	18.53	1.37	CON
	Power Boiler No. 4	GPPLPB4	61.0	1.22	475	21.82	45.23	CON
	Power Boiler No. 5	GPPLPB5	70.7	2.74	503	18.47	197.13	CON
	Combination Boiler No. 4	GPPLCB4	72.2	2.44	500	21.88	281.10	CON
	Power Boiler No. 6	GPPLPB6	18.3	1.83	622	17.43	1.40	CON
	Recovery Boiler No 1 Baseline	GPPLRB1B	76.2	3.66	360	8.80	-6.21	EXP
	Recovery Boiler No 2 Baseline	GPPLRB2B	76.2	3.66	372	8.80	-8.88	EXP
	Recovery Boiler No 3 Baseline	GPPLRB3B	40.5	3.41	372	7.28	-8.58	EXP
	Recovery Boiler No 4 Baseline	GPPLRB4B	70.1	3.66	474	16.86	-34.97	EXP
	SDT No. 1 Baseline	GPPSDT1B	30.5	0.76	366	7.53	-0.13	EXP
	SDT No. 2 Baseline	GPPSDT2B	30.5	0.91	375	9.51	-0.18	EXP
	SDT No. 3 Baseline	GPPSDT3B	33.2	0.76	369	3.57	-0.18	EXP

Table 1-5. Inventory of SO_2 Sources Included in the PSD Class I Air Modeling Analyses

Facility	Units	ISCST3 ID Name	Stack Parameters: Height (m)	Diameter (m)	Temperature (K)	Velocity (m/s)	Emission Rate (g/s)	PSD Source? (EXP/CON)
	SDT No. 4 Baseline	GPPSDT4B	62.8	1.52	346	8.26	-0.71	EXP
	Lime Kiln No. 1 Baseline	GPPLLK1B	15.2	1.28	401	5.24	-0.24	EXP
	Lime Kiln No. 2 Baseline	GPPLLK2B	15.9	1.71	341	10.67	-0.24	EXP
	Lime Kiln No. 3 Baseline	GPPLLK3B	15.9	1.71	342	8.47	-0.48	EXP
	Lime Kiln No. 4 Baseline	GPPLLK4B	45.4	1.31	351	16.46	-1.40	EXP
	Power Boiler No. 4 Baseline	GPPLPB4B	37.2	1.22	477	14.54	-45.22	EXP
	Power Boiler No. 5 Baseline	GPPLPB5B	72.9	2.74	520	15.97	-161.15	EXP
	CB No. 4 Baseline	GPPLCB4B	72.9	3.05	477	10.52	-121.28	EXP

Footnotes:

[a] There are four combustion turbines at Florida Power & Lights facitility located in Putnam. Two of these combustion turbines are increment consuming.

Table 1-6. Structure Dimensions Used in the Air Modeling Analysis

	Actual Building Dimensions					
	Height		Length		Width	
Structure	ft	m	ft	m	ft	m
Cedar Bay						
CFB Boiler Building	161	49.1	248	75.7	110	33.5
Stone Container						
Recovery Boiler Building	90	27.4	157	47.8	80	24.3
Pump Mill	72	21.9	172	52.4	113	34.3
Power Boiler Building	60	18.3	201	61.3	115	35.1
Bark Boiler Building	60	18.3	75	22.9	68	20.6

Table 1-7. Cedar Bay Facility Property Boundary Receptors

Direction[a] (Degrees)	Distance (meters)	Direction[a] (Degrees)	Distance (meters)
10	357	190	101
20	315	200	96
30	273	210	88
40	155	220	83
50	152	230	91
60	156	240	104
70	142	250	112
80	127	260	118
90	143	270	129
100	147	280	139
110	131	290	155
120	135	300	182
130	170	310	218
140	166	320	235
150	156	330	258
160	144	340	265
170	124	350	349
180	110	360	372

[a] With respect to the location of the CFBs.

Table 1-8. Summary of Receptors Used for the PSD Class I Modeling Analyses

Receptor Number	UTM Coordinate (km)	
	Easting	Northing
Wolf Island NWR		
1	470.5	3459.0
Okefenokee NWR		
2	391.0	3417.0
3	390.0	3410.0
4	392.0	3400.0
5	390.0	3395.0
6	391.0	3390.0
7	390.0	3384.0
8	383.0	3382.0
9	378.0	3382.0
10	374.0	3383.0
11	370.0	3383.0

All receptors are located in UTM Zone 17.

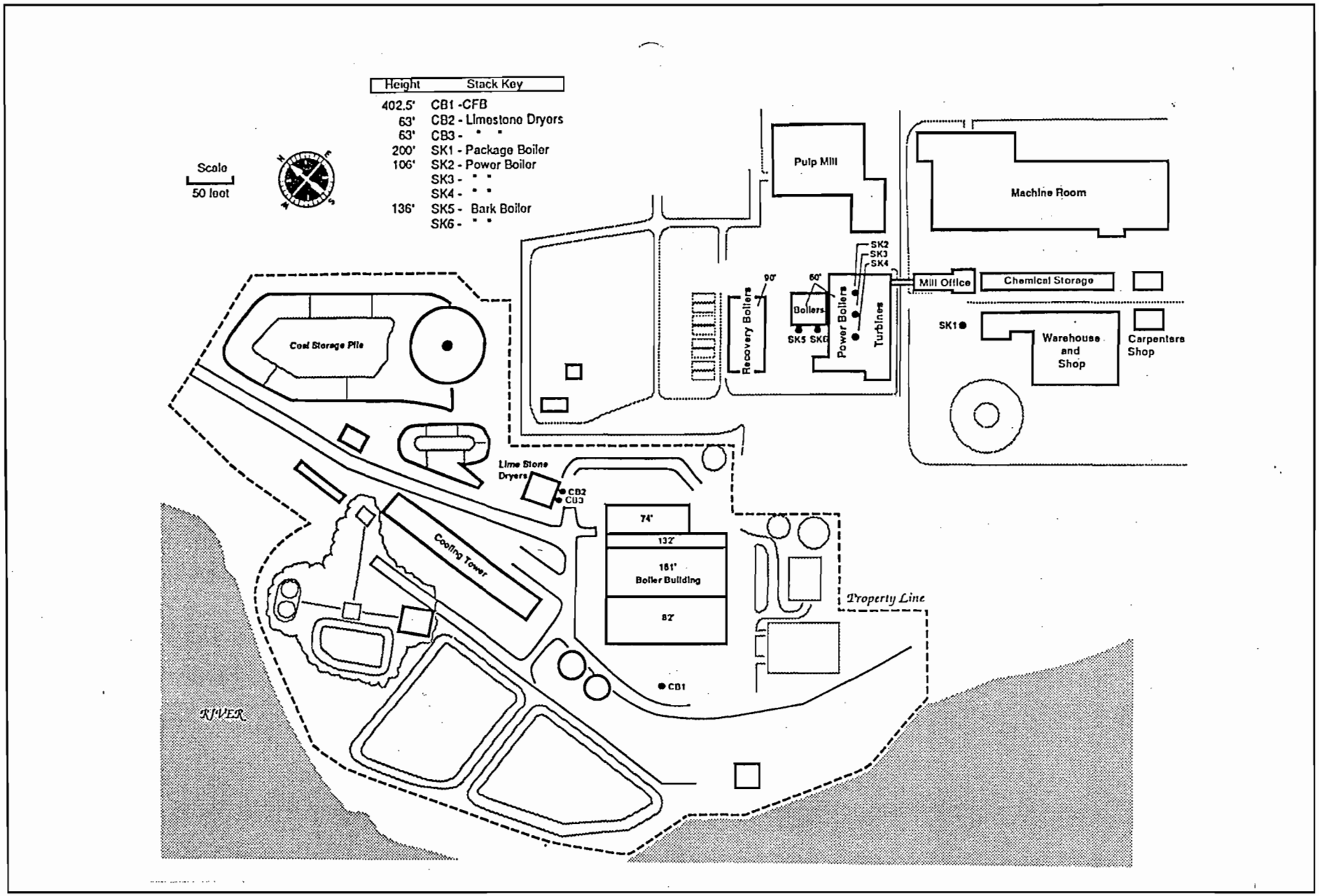

Figure 1-1. Stack and Building Configuration
Cedar Bay Generating Plant, Jacksonville, Florida

Golder Associates

2.0 AIR MODELING ANALYSIS RESULTS

2.1 AAQS ANALYSES

The maximum predicted 3-hour average SO_2 concentrations from the screening analysis due to all future modeled sources are presented in Table 2-1. Based on the results of the screening analyses, additional refined modeling analyses were performed. The refined modeling results were added to a measured, non-modeled background concentration of 10 $\mu g/m^3$, to produce a cumulative total air quality concentration that can be compared with the AAQS. The AAQS refined analysis results are presented in Table 2-2.

The maximum predicted total (including a background concentration of 272 $\mu g/m^3$) 3-hour average SO_2 concentration is 897 $\mu g/m^3$. This predicted concentration is well below the 3-hour average SO_2 AAQS of 1,300 $\mu g/m^3$, and, as such, compliance with the 3-hour average AAQS for SO_2 is demonstrated.

2.2 PSD CLASS II ANALYSIS

The maximum predicted 3-hour average SO_2 PSD increment consumption from the screening analysis due to all PSD-affecting sources is presented in Table 2-3. Based on the results of the screening analyses, refined modeling analyses were performed for receptors located at 320 degrees, 1,500 m and 90 degrees, 5,000 m from the CFB Stack Location. The refined modeling results are presented in Table 2-4.

The maximum H2H 3-hour average SO_2 PSD increment consumption was determined to be 599 $\mu g/m^3$, which is above the allowable increment of 512 $\mu g/m^3$. Several other exceedances of the 3-hour PSD Class II increment for SO_2 were predicted for other time periods and receptor combinations.

To determine all the time period and receptor combinations for which the predicted 3-hour average concentration was above 512 $\mu g/m^3$, the threshold function of the ISCST3 model was used to create the appropriate event input file. This event file was used to determine the contributions of the Cedar Bay facility to any predicted exceedances of the allowable 3-hour

PSD increment. The time period and receptor combinations evaluated in this analysis, and Cedar Bay's contributions to these predicted impacts are summarized in Table 2-5. As shown in Table 2-5, Cedar Bay's maximum contribution to any of the predicted exceedances was 0.014 $\mu g/m^3$, well less than the 3-hour significance level for SO_2 of 25 $\mu g/m^3$. Increment consuming sources at the Anheuser Busch facility were responsible for the majority of the predicted exceedances. Although, compliance with the 3-hour average PSD Class II increment for SO_2 is not demonstrated by this modeling analysis, Cedar Bay does not contribute significantly to any modeled exceedance of the 3-hour average PSD Class II increment for SO_2.

2.3 PSD CLASS I ANALYSIS

The maximum predicted SO_2 PSD increment consumption at the ONWR and WINWR PSD Class I areas due to all nearby PSD-affecting sources is compared to the allowable 3-hour average PSD Class I increment for SO_2 in Table 2-6.

The maximum predicted 3-hour average SO_2 PSD increment consumption at the ONWR PSD Class I areas is 29.4 $\mu g/m^3$, which is above the allowable 3-hour average PSD Class I increment of 25 $\mu g/m^3$. Using an approach similar to that described in Section 2.2, the ISCST3 model was used to determine Cedar Bay's contribution to the predicted exceedances of the Class I increment. The time period and receptor combinations evaluated in this analysis, and Cedar Bay's contributions to these predicted impacts are summarized in Table 2-7. As shown in Table 2-7, Cedar Bay's maximum contribution to any of the predicted exceedances was 0.79 $\mu g/m^3$, again, less than USEPA's recommended 3-hour average significance level for SO_2 of 1 $\mu g/m^3$. Although compliance with the 3-hour average PSD Class I increment for SO_2 is not demonstrated by this modeling analysis, Cedar Bay does not contribute significantly to any predicted exceedances.

Further analysis of these maximum impacts reveals that the Seminole Power Plant in Palatka, by itself, causes impacts greater than the 25 $\mu g/m^3$ allowable increments for the 3-hour averaging time. It is noted that the modeling analysis does not take into account any

SO_2 half-life, which in this case may be appropriate for modeling long-range transport of SO_2, due to the great distance to the Class I area.

Table 2-1. Maximum Predicted 3-Hour Average SO_2 Impacts Due to All Modeled Sources, AAQS Screening Analysis

Concentration[a] ($\mu g/m^3$)	Receptor Location[b] Direction (degree)	Receptor Location[b] Distance (m)	Time Period (YYMMDDHH)
Highest 3-Hour Average			
695	320	1750	84102718
622	320	1750	85082315
558	320	1500	86110121
688	320	1750	87090515
518	320	1500	88112309
Highest, Second-Highest, 3-Hour Average			
540	320	1500	84011306
552	320	1750	85042018
528	320	1500	86122915
533	320	1750	87060718
450	320	1500	88020518

Note:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:
[a] Based on 5-year meteorological record, Jacksonville/Waycross, 1984 through 1988.
[b] Relative to the location of the CFB stack.

Table 2-2. Maximum Predicted 3-Hour Average SO_2 Impacts Due to All Modeled Sources AAQS Refined Analysis

Concentration[a] ($\mu g/m^3$)			Receptor Location[b]		Time Period	Florida AAQS[c]
Modeled	Background	Total	Direction (degree)	Distance (m)	(YYMMDDHH)	($\mu g/m^3$)
Highest 3-Hour Average						
695	272	967	320	1750	84102718	--
622	272	904	320	1750	85082315	--
666	272	948	322	1750	86030918	--
688	272	960	320	1750	87090515	--
656	272	928	326	1650	88060918	--
Highest, Second-Highest, 3-Hour Average						
625	272	897	322	1750	84052018	1300
599	272	871	326	1550	85032412	1300
600	272	872	322	1750	86100815	1300
584	272	856	318	1650	87050906	1300
599	272	871	318	1650	88112124	1300

Note:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:

[a] Based on 5-year meteorological record, Jacksonville/Waycross, 1984 through 1988.

[b] Relative to the location of the CFB stack.

[c] Applicable to highest, second-highest concentration for each year only.

Table 2-3. Maximum Predicted 3-Hour Average SO_2 Impacts Due to All Modeled Sources, PSD Class II Increment Screening Analysis

Concentration[a] ($\mu g/m^3$)	Receptor Location[b] Direction (degree)	Receptor Location[b] Distance (m)	Time Period (YYMMDDHH)
Highest 3-Hour Average			
528	320	1500	84011303
538	90	5000	85051112
504	320	1500	86122915
529	320	1500	87010512
487	320	1500	88112309
Highest, Second-Highest, 3-Hour Average			
518	320	1500	84090809
353	320	1500	85092612
492	320	1500	86110121
468	320	1500	87010509
416	320	1500	88020518

Note:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:
[a] Based on 5-year meteorological record, Jacksonville/Waycross, 1984 through 1988.
[b] Relative to the location of the CFB stack.

Table 2-4. Maximum Predicted 3-Hour Average SO_2 Impacts Due to All Modeled Sources, PSD Class II Increment Refined Analysis

Concentration[a] ($\mu g/m^3$)	Receptor Location[b] Direction (degree)	Receptor Location[b] Distance (m)	Time Period (YYMMDDHH)	Allowable PSD Class II Increment[c] ($\mu g/m^3$)
Highest 3-Hour Average				
655	322	1550	84053012	--
581	90	4900	85051112	--
623	318	1650	86090112	--
598	320	1550	87031312	--
650	326	1650	88060918	--
Highest, Second-Highest, 3-Hour Average				
567	326	1550	84040618	512
365	91	5100	85091112	512
573	324	1750	86031309	512
584	318	1650	87050906	512
599	318	1650	88112124	512

Note:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:

[a] Based on 5-year meteorological record, Jacksonville/Waycross, 1984 through 1988.

[b] Relative to the location of the CFB stack.

[c] Applicable to highest, second-highest concentration for each year only.

Table 2-5. Summary of Predicted 3-Hour Average PSD Class II Increment Exceedances and Cedar Bay's Contribution

Maximum Predicted 3-Hour Concentration ($\mu g/m^3$)	Period (YYMMDDHH)	Receptor Location[a] Direction (degrees)	Receptor Location[a] Distance (meters)	Cedar Bay's Contribution ($\mu g/m^3$)
527.9	84011303	320	1,500	0
549.3	84012106	320	1,450	0
610.1	84012115	320	1,550	0
551.2	84020418	324	1,500	0
571.8	84020609	324	1,500	0
634.4	84022315	326	1,550	0
528.0	84040421	328	1,650	0
564.5	84040521	324	1,500	0
616.6	84040612	324	1,550	0
562.3	84040615	324	1,550	0
566.9	84040618	326	1,550	0
602.3	84050409	328	1,650	0
655.0	84053012	322	1,550	0
518.3	84090809	320	1,500	0
546.1	84090812	318	1,550	0
515.6	84091512	324	1,550	0
524.4	84101012	316	1,650	0
560.7	84101012	318	1,650	0
548.5	84112206	320	1,550	0
581.2	85051112	90	4,900	0
534.8	85051112	88	4,800	0
559.2	85051112	88	4,900	0
530.8	85051112	88	5,000	0
516.0	85051112	89	4,700	0
568.1	85051112	89	4,800	0
580.7	85051112	89	4,900	0
547.1	85051112	89	5,000	0
538.8	85051112	90	4,700	0
579.5	85051112	90	4,800	0
581.2	85051112	90	4,900	0
538.0	85051112	90	5,000	0
546.3	85051112	91	4,700	0
573.5	85051112	91	4,800	0
563.7	85051112	91	4,900	0
514.2	85051112	91	5,000	0
542.7	85051112	92	4,700	0
556.3	85051112	92	4,800	0
535.6	85051112	92	4,900	0

Table 2-5. Summary of Predicted 3-Hour Average PSD Class II Increment Exceedances and Cedar Bay's Contribution

Maximum Predicted 3-Hour Concentration ($\mu g/m^3$)	Period (YYMMDDHH)	Receptor Location[a] Direction (degrees)	Receptor Location[a] Distance (meters)	Cedar Bay's Contribution ($\mu g/m^3$)
531.8	85051112	93	4,700	0
533.1	85051112	93	4,800	0
516.2	85051112	94	4,700	0
365.0	85091112	91	5,100	0
570.1	86010512	324	1,500	0
586.0	86011109	318	1,500	0
542.9	86012615	324	1,550	0
516.1	86030818	318	1,650	0
572.7	86031309	324	1,750	0
562.8	86032615	318	1,650	0
551.8	86041418	318	1,750	0
622.8	86090112	318	1,650	0
515.6	86091218	326	1,550	0
608.5	86101612	320	1,550	0
574.7	86102524	324	1,750	0
532.2	86110203	320	1,450	0
555.3	86121424	318	1,500	0
539.1	86121821	324	1,500	0
534.9	86122209	318	1,550	0
517.0	86122412	328	1,650	0
552.5	86123012	322	1,500	0
529.2	87010512	320	1,500	0
525.4	87011306	326	1,500	0
551.9	87012615	324	1,550	0
567.2	87012715	324	1,500	0
534.3	87013109	324	1,500	0
515.3	87022624	316	1,550	0
598.4	87031312	320	1,550	0
525.8	87031918	324	1,450	0
521.7	87040818	324	1,550	0
584.3	87050906	318	1,650	0
587.3	87052515	320	1,650	0
557.2	87052918	316	1,650	0
578.7	87052918	318	1,650	0
576.5	87101218	318	1,550	0
597.5	87101512	318	1,650	0
556.5	87101715	318	1,550	0
580.0	87102618	318	1,500	0

Table 2-5. Summary of Predicted 3-Hour Average PSD Class II Increment Exceedances and Cedar Bay's Contribution

Maximum Predicted 3-Hour Concentration ($\mu g/m^3$)	Period (YYMMDDHH)	Receptor Location[a] Direction (degrees)	Receptor Location[a] Distance (meters)	Cedar Bay's Contribution ($\mu g/m^3$)
524.9	88011021	316	1,550	0
529.3	88011024	316	1,500	0
625.3	88031212	324	1,750	0.014
572.8	88031406	322	1,450	0
609.3	88031406	322	1,500	0
585.7	88050212	320	1,650	0
551.0	88050618	324	1,500	0
649.7	88060918	326	1,650	0
649.7	88060918	326	1,650	0
558.8	88060921	326	1,650	0
546.5	88070109	324	1,450	0
596.3	88090115	318	1,650	0
516.0	88101415	318	1,650	0
618.4	88101912	324	1,550	0
609.8	88111215	318	1,650	0
547.0	88111812	318	1,650	0
599.0	88112124	318	1,650	0
591.1	88112124	316	1,650	0
525.6	88121206	318	1,500	0
556.8	88121206	320	1,550	0
533.8	88122918	316	1,750	0

Notes:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:
[a] Relative to the location of the CFB Stack.

Table 2-6. Maximum Predicted 3-Hour Average SO_2 Impacts Due to All Modeled Sources, PSD Class I Analysis

Concentration[a] ($\mu g/m^3$)	Receptor UTM Coordinates Easting (meters)	Receptor UTM Coordinates Northing (meters)	Time Period (YYMMDDHH)	Allowable 3-Hour SO_2 PSD Increment ($\mu g/m^3$)
Highest 3-Hour Average				
39.0	383000	3382000	84021315	[b]
31.1	390000	3384000	85071021	[b]
33.8	470500	3459000	86121112	[b]
34.8	390000	3384000	87091221	[b]
28.4	370000	3383000	88071909	[b]
Highest, Second-Highest, 3-Hour Average				
29.4	392000	3400000	84070409	25
24.3	391000	3390000	85102415	25
22.3	374000	3383000	86102521	25
25.8	391000	3390000	87062209	25
24.7	370000	3383000	88060606	25

Note:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Footnotes:

[a] Based on 5-year meteorological record, Jacksonville/Waycross, 1984 through 1988.

[b] Applicable only to the highest, second-highest, concentration predicted for a given year.

Table 2-7. Summary of Predicted 3-Hour Average PSD Class I Increment Exceedances and Cedar Bay's Contribution

Maximum Predicted Concentration ($\mu g/m^3$)	Period (YYMMDDHH)	Receptor UTM Coordinates Easting (meters)	Receptor UTM Coordinates Northing (meters)	Cedar Bay's Contribution ($\mu g/m^3$)
28.23	84012412	390000	3410000	0
31.00	84012412	392000	3400000	0
38.96	84021315	383000	3382000	0
31.73	84052912	470500	3459000	0.143
29.40	84070409	392000	3400000	0
29.45	84070409	390000	3410000	0
29.40	84070409	392000	3400000	0
28.97	84080109	370000	3383000	0
27.49	84080509	378000	3382000	0
26.85	84080509	374000	3383000	0
26.26	85061518	391000	3417000	0
31.06	85071021	390000	3384000	0
28.63	85071021	391000	3390000	0
31.06	85071021	390000	3384000	0
24.31	85102415	391000	3390000	0
25.46	85102415	390000	3410000	0
28.73	85102415	392000	3400000	0
26.64	85102415	390000	3395000	0
28.27	85110309	383000	3382000	0.794
25.10	86081321	392000	3400000	0
26.24	86093009	374000	3383000	0
22.31	86102521	374000	3383000	0
33.75	86121112	470500	3459000	0.068
26.40	87010103	374000	3383000	0
28.36	87010103	370000	3383000	0
27.85	87011809	383000	3382000	0
25.02	87033003	390000	3395000	0
25.52	87033003	391000	3390000	0
25.82	87062209	391000	3390000	0
34.80	87091221	390000	3384000	0
26.47	87091221	391000	3390000	0
25.48	87121421	383000	3382000	0
26.42	88040312	378000	3382000	0
24.74	88060606	370000	3383000	0
28.37	88071909	370000	3383000	0

Notes:
YYMMDDHH = the two digit designation for the year, month, day, and hour.

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

September 3, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey A. Walker
Cedar Bay Cogenerating Company, L.P.
P.O. Box 26324
Jacksonville, FL 32226

Re: Request for Additional Information
File No. PA 88-24 (PSD-FL-137)
Cedar Bay Cogenerating Project

Dear Mr. Walker:

This letter is a follow-up to our telephone conversation of yesterday. In order to continue processing your application, the Department will need the additional information below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please identify the specific emission characteristics of each operational or startup mode where excess emissions have been requested greater than 2 hours. The magnitude of each regulated pollutant (as compared to the existing permitted limit), as well as the requested duration should be provided. Additionally, the Department requests an estimate of the frequency of these operational modes so as to be able to estimate the annual impacts.

2. Please identify a 3-hour SO_2 limit which Cedar Bay is capable of routinely meeting. Since this limit will exceed the current (0.24 lb/MMBtu) limit, provide modeling to estimate the short-term air quality impacts and that all standards and increments will be met. The Department's Mr. Cleveland Holladay may be contacted at 850/921- 8986 to ensure that proper protocols are met.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Please note that per Rule 62-4.055(1): *"The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department..... Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application."*

If you have any questions, please call Michael P. Halpin, P.E. at 850/921-9530.

Sincerely,

Michael P Halpin DEP/DARM
New Source Review Section

Hamilton S. Oven, P.E.
James L. Manning, P.E. RESD
Chris Kirts, DEP-NED

Fold at line over top of envelope to the right of the return address

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Jeffrey Walker
Cedar Bay Cogen
PO Box 26324
Jacksonville, Fl 32224

4a. Article Number
Z 333 618 135.

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X JC Dewitt

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Z 333 618 135

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Jeff Walker	
Street & Number Cedar Bay	
Post Office, State, & ZIP Code Jax FL	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 9-3-99	

PS Form **3800**, April 1995

pa 88-24
PSD-FL-137

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION	)	
CEDAR BAY COGENERATION PROJECT	)	
CEDAR BAY GENERATING COMPANY, LP	)	CERTIFICATION NO. PA88-24C
U.S. GENERATING COMPANY	)	OGC NO. 99-XXXX
(PG&E GENERATING COMPANY)	)	
	)	

PROPOSED ORDER MODIFYING CONDITIONS OF CERTIFICATION

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

On March 22, 1999, CBGC filed a request to modify the PSD Permit (PSD-FL-137). On May 24, 1999, CBGC requested corresponding modifications to the conditions of certification pursuant to section 403.516(l)(b), F.S. CBGC requested changes in the mercury test method, language concerning burning of short fiber recycle rejects, method of maximum heat input rate measurement and providing for modifications to conditions to conform to amendments to federally delegated or approved permits. The Department also proposes to update and correct the regulatory references to reflect the applicable existing Chapter 62, Florida Administrative Code

Copies of CBGC's request were distributed to all parties to the certification proceeding and made available for public review. On September XX, 1999, the Department published a Notice of Intent to Issue the Proposed Modification in the Florida Administrative Weekly. On XX, 1999, a notice of intent to modify the PSD permit was published in the Florida Times Union. Copies of the intent to issue were sent to all parties to the original proceeding. As of XX, 1999, all of the parties to the original proceeding had received copies of the intent to issue.

The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No written objection to the proposed modifications was received by the Department.

Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed modifications to the Conditions of Certification relating to mercury testing, short fiber rejects and modification of conditions at the Cedar Bay Cogeneration Facility are hereby APPROVED. Pursuant to section 403.5l6(1)(b), F.S., the Department hereby MODIFIES the conditions of certification for the CBCP as follows:

I. GENERAL

The construction and operation of CBCP shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters 17 62-210 through 17 62-297, 17 62-302, 17 62-4, 17 62-256 (Open Burning), 17 62-601, 17 62-702, 17 62-312, 17 62-532, 17 62-550, 17 62-555, 17 62-25, 17 62-610, 17 62-660 and 17 62-772, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

II. AIR

The construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 62-210 through 62-297, F.A.C.. In addition to the foregoing,CBCP shall comply with the following conditions of certification as indicated.

A. Emission Limitations for CBCP Boilers

1. Fluidized Bed Coal Fired Boilers (CFB)

a. & b. No change

c. The maximum combined heat input to each the CFBs shall not exceed 1063 MMBtu/hr. This reflects a combined total of 318 9 MMBtu/hr. for all three units.

d. through g. No change

h. To the extent that it is consistent with Condition II.A.1.b., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998, by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, L.P., and the following, CBCP shall may burn all or a portion of the short fiber rejects generated by Seminole Kraft in processing recycled paper as a supplemental fuel. Prior to burning the rejects as a supplemental fuel, however, CBCP shall conduct a test burn to determine the effects of burning the rejects. No less than At least ninety (90) days prior to completion of construction any proposed test burn, CBCP shall submit a plan to DEP for conducting a 30-day test burn within one year after initial compliance testing. That test shall be designed to ascertain whether the CFBs can burn the rejects as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DEP and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DEP and to the RESD within forty-five (45) days of completion of the test burn. DEP shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusions by CBCP{ that the test burn demonstrated that the rejects can be burned in compliance with this Condition of Certification.

2. Coal Fired Boiler Controls

a. & b. No change

c. CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in

Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DEP, RESD, and EPRI, CBC shall submit a mercury control test protocol to DEP for approval by December 1, 1993. Results of the test shall be submitted to the DEP within 90 days of completion.

II.A.11.c. (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measured adopted (40 CFR 60.7(c)(2)).

d. & e. No change

3. through 7. No change

8. Compliance Tests for each CFB

a. through e. No change

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

(1) through (4) No change

(5) Method 5 or Method 17 or Method 29 for particulate matter.

(6) through (10) No change

(11) Method 12 or Method 29 for lead.

(12) through (14) No change

(15) Method 101A or EPA Method 29 for mercury.

(16) Method 104 or Method 29 for beryllium.

(17) and (18) No change

9. Continuous Emission Monitoring for each CFB

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

b. through f. No change

g. Startup, shutdown, and full Flow Reheat Bypass shall be defined as follows:

(1) "full flow reheat bypass" (FFRB) shall be defined as the mode of operation in which the steam from a boiler bypasses the turbine generator by being routed from the main steam piping to the cold reheat piping and then passing this steam through both reheater sections.

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

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

10. No change

11. Reporting for each CFB

a. & b. No change

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

(1) No change

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns (including those occurring due to bed cooling below 1400 °F as a normal part of full flow reheat bypass), and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measured adopted (40 CFR 60.7(c)(2)).

(3) through (5) No change

d. No change

II. B. CBCP - Material Handling and Treatment

1. No change

2. Material Handling and Usage Rates

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

Unloading/Storage Handling /Usage Rate

Material	TPM	TPY
Coal	234,000	1,287,000
Limestone/Aragonite	54,000	347,000

b. For all other coal, limestone/aragonite, flyash, and bed ash handling sources the handling/usage rates shall not exceed the following:

Handling/Usage Rate

Material	**TPM**	**TPY**
Coal	117,000	1,170,000
Limestone	27,000	320,000
Fly Ash	28,000	336,000
Bed Ash	8,000	88,000

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

III. Water Discharges

Any discharges into any waters of the State during construction and operation of CBCP shall be in accordance with all applicable provisions of Chapters 17 62 -301, 17 62-302 and 17 62-660, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, CBCP shall comply with the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

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

1. through 6. No change

7. Storm Water Runoff

a. Construction - No change

b. Operation

(1) Yard Area Runoff - During normal plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods less than the

22-year, 24-hour rainfall. During periods of operation when the CBCP is off-line, these necessary measures, as specified above, shall be used during rainfall periods greater than a 12-year, 24 -hour storm. The discharge shall comply with all the monitoring requirements for Yard Area Runoff specified in Part I of NPDES Permit FL0041173 FL0061204 for this facility.

(2) Storage Area Runoff - During operation there shall be no discharges from the stormwater basins for storms less than the fifty-five year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in 50 year, twenty four-hour storm shall meet the limits in 7.a. above and shall be monitored at OSN 008 by a grab sample once per discharge, but not more than once per week. The discharge shall comply with all the monitoring requirements for the Coal, Limestone, and Ash Storage Area specified in Part I of NPDES Permit FL0041173 FL0061204 for this facility.

c. and d. No change

e. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17 62-25.027, F.A.C.

XXI. MODIFICATION OF CONDITIONS

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

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

B. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP issued amendments, modifications or

renewals of any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation Permit, or National discharge elimination System (NPDES) permit for the project and the conditions of such permits shall be controlling over these Conditions of Certification.

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

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

DONE AND ENTERED this _____ day of _____, 1999 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____

KIRBY B. GREEN
Deputy Secretary
Marjory Stoneman Douglas Bldg.
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
(904) 488-7131

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

August 26, 1999

Mr. Jeffrey A. Walker
Cedar Bay Cogenerating Company, L.P.
P.O. Box 26324
Jacksonville, Florida 32226

Re: Cedar Bay Cogenerating Project, PA 88-24

Dear Mr. Walker:

The Department has reviewed your requests for modification of the PSD Permit No. PSD-FL-137 and for modifying the Conditions of Certification for the Cedar Bay facility in Duval County. The Bureau of air Regulation has indicated concurrence with your requested PSD amendments with one exception. They do not agree with changing the heat input measuring paradigm from an hourly limit to a 24-hour block average. I am developing the modification order to reflect the PSD amendments as well as the modification language requested in your May 24, 1999, letter.

You may wish to contact Mr. Mike Halpin concerning the heat input issue. If you have any questions on this matter, I can be contacted at (850) 487-0472.

Sincerely,

Hamilton S. Oven

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

cc: Mike Halpin
Al Linero
Scott Goorland

5/24 AL

Cedar Bay Generating Company, L.P.

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

May 20, 1999

Clair Fancy
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Modification of the Cedar Bay Cogeneration Project's PSD Permit (PSD-FL-137)

Dear Mr. Fancy:

On March 22, 1999 Cedar Bay Cogenerating Company, L.P. (Cedar Bay) submitted a PSD Modification request to the FDEP and the various parties to the Certification. In this letter we wish to request changes and additions to the March 22, 1999 modification request.

Specifically, we would like to:

- Correct the reference to the mercury testing requirement in the modification request;
- Modify the proposed language relating to fiber reject test burns; and
- Clarify the maximum heat input provisions of the PSD permit.

Each of these requests is addressed in order.

Mercury Testing Requirement

The PSD Modification request includes a request that the PSD language relating to mercury testing be removed, since the requirement has been satisfied. The PSD modification request incorrectly sited Condition II.A.1.h as the section to delete. The correct reference should have been II.A.2.c.

Fiber Reject Test Burns

The PSD Modification request includes a request to update the PSD language as it relates to short fiber rejects. After consultation with Smurfit Stone Container Corporation, we propose to modify Condition II.A.1.h as follows:

h. To the extent that it is consistent with condition II.A.1.b., the SETTLEMENT AND RELEASE AGREEMENT made on July 24, 1998 by and between Smurfit Stone Container Corporation and Cedar Bay Generating Company, L.P., and the following, CBCP ~~shall~~ may burn all or a portion of the short fiber rejects generated by Seminole Kraft in processing recycled paper as a supplemental fuel. Prior to burning the rejects

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

Maximum Heat Input Provisions

In addition to the modifications proposed in the March 22, 1999 submission, Cedar Bay is seeking to clarify how the facility complies with the maximum heat input provision in Condition II.A.1.c of the PSD permit. This permit condition limits the heat input from the project to a combined total of 3189 MMBtu/hr. The overall maximum pound per hour and ton per year emission limits for the project are based on the combined total heat input for the project.

We request modification of Condition II.A.1.c to allow some operational flexibility with each individual boiler. On some occasions we would like the flexibility to operate one individual boiler above 1063 MMbtu/hr heat input while the other boilers collectively will not exceed 3189 MMBtu/hr. All three boilers were built to the same specifications, but like all complex equipment each boiler has its own idiosyncrasies. The proposed permit change will allow the most effective use of the facility without exceeding any emission limit.

In addition, we propose that the most appropriate method for compliance with the 3189 MMBtu/hr permit limit is on a 24-hour block average basis. Heat input is calculated using the measured mass of coal fired multiplied by the heat content of the coal. The heat content of the coal is measured only once per day, by laboratory analysis. Because there may be variations in the heat content of the coal on an hour-by-hour basis, the data collected by the facility for heat input are only meaningful on a day-long basis. This change will not impact emission limits on either a lb/MMBtu or lb/hr basis.

Finally, Cedar Bay is requesting that the same permit note that is present in the proposed Title V permit be added to the PSD permit, for consistency.

In conclusion, we propose that Condition II.A.1.c be changed to read the following:

c. The maximum combined total heat input into the CFBs shall not exceed 3189 MMBtu/hr, measured on a 24-hr block average.

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 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.

We appreciate your consideration of these proposed changes, as well as the changes requested in our March 22, 1999 submission. We want to work with you to provide the information you need to approve these proposed modifications. Please contact Jeff Walker at 904-751-4000 ext.22, with any questions or comments.

Sincerely,

Tim Cotner
General Manager
Cedar Bay Cogeneration, L.P.

cc: Hamilton S. Oven, P.E., Administrator, Siting Coordination Office, FDEP
A. Jablonowski, P.E., Earth Tech
Michelle Golden, US Generating
Parties to Certification PA88-24

CC: M. Halpin, BAR
NED
Duval Co.

CEDAR BAY GENERATING COMPANY

VENDOR NO: DEP0002 NAME: Dept of Environmental CHECK DATE: 3-18-99 25384

REFERENCE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT TAKEN	NET AMOUNT PAID
31099	3-10-99	250.00	.00	250.00
TOTAL ▶		250.00	.00	250.00

[redacted]

CEDAR BAY GENERATING COMPANY
LIMITED PARTNERSHIP
P.O. BOX 26324, JACKSONVILLE, FL 32226-6324

CITIBANK, N.A. BR. 0
NEW YORK, NY 10043
1-8-210

[redacted]

DATE 3-18-99

AMOUNT $*********250.00

Pay: **********Two hundred fifty dollars and no cents

PAY

TO THE ORDER OF

Dept of Environmental
Protection
2600 Blair Stone Rd
Tallahassee, FL 32399-2410

[redacted]

E G Henderson
Randy M Cole

MP

Security features included. Details on back.

081124/8-89

Cedar Bay Generating Company, L.P.

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

Tel: 904.751.4000
Fax: 904.751.7320

March 22, 1999

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

Re: Cedar Bay Generating Company, L.P. 0310337-003-AC
Permit No. PSD-FL-137

Dear Mr. Fancy:

Cedar Bay Generating company hereby submits the enclosed Request for Modification of PSD permit, pursuant to Section 403.416, F. S. The requested modification is explained in detail in the Request and it's supporting information. The scope of the requested changes have previously been discussed with members of your staff including Mike Halpin and Wendy Alexander. Also enclosed is a check payable to the Department in the amount of $250.00 as a required fee.

In addition to the four (4) copies provided to you with this letter, copies of this Request are being sent directly to the parties to the Site Certification. If additional copies are needed, please let us know.

Should you and any staff member have any questions concerning this request, please contact me at (904) 751-4000 extension 22.

Sincerely,

Jeffrey A. Walker

Jeffrey A. Walker
Environmental Manager

CC: Hamilton S. Oven, Jr., FDEP Siting Office
Tim Cotner, Cedar Bay
Michelle Golden, Bethesda
Parties to Certification PA88-24 (w/enc.)

CC: Duval Co
NED
M. Halpin, BAR
B. Oven, PPS

Cedar Bay Cogeneration, Inc.

Jacksonville, Florida

Modification of the Cedar Bay Cogeneration Project's PSD Permit (PSD-FL-137)

ENSR

March 1999

Document 5402-090-7.doc

CONTENTS

1.0 INTRODUCTION

Cedar Bay Cogeneration, Inc. (CBC) owns and operates the Cedar Bay Cogeneration Project (CBCP) located in Jacksonville, Florida. The cogeneration facility generates approximately 250 megawatts (MW) net of steam electric power plus 380,000 pounds per hour (lb/hr) of steam (for the host facility) using coal as the primary fuel. The facility is co-located with the Smurfit-Stone Container paper mill (the cogeneration steam host) at the end of a peninsula that is bounded to the west by the Broward River, to the east by Dunn Creek, and to the south by the St. Johns River. All state, regional, and local environmental approvals for the cogeneration facility are incorporated under the State of Florida's Site Certification Application (SCA) Order for CBCP (PA 88-24).

CBC is seeking to modify certain conditions contained in the Prevention of Significant Deterioration (PSD) permit for CBCP pursuant to Section 403.516, Florida Statutes (FS) for the boiler sulfur dioxide emissions averaging times, and is seeking to clarify averaging times for boiler heat input and definition of startup as it pertains to the facility.

Ans ID 0310337-003-AC
PSD-FL-137

2.0 MODIFICATIONS TO PSD PERMIT CONDITIONS

2.1 Startup and Shutdown Definition

Discussion

The Site Certification for Cedar Bay Generating Company circulating fluidized bed (CFB) boilers limits the emissions of air pollutants (including SO2, NOx and CO) to certain levels. The Site Certification specifies that compliance with these emission limits is to be determined using both reference test methods as well as continuous emissions monitors (CEMs). Although not specifically described in the Site Certification, emissions in excess of these emission limits during startup, shutdown and malfunction of the boilers are not considered permit violations by the Florida Department of Environmental Protection (DEP). Rather, they are considered "excess emissions"; periods of excess emissions during startup, shutdown, and malfunction must be identified as part of the quarterly reporting requirement of the permit.

However, the permit does not specifically define what constitutes startup, shutdown, or malfunction.

Startup and shutdown of the Cedar Bay CFB boilers are a normal part of routine operation of the facility. During boiler startup, the circulating inert bed material is heated using fuel oil until a bed temperature of 1000°F is reached, at which time the introduction of solid fuel (coal) into the boiler is initiated. Fuel oil firing continues until the bed reaches a combustion-sustaining temperature of approximately 1400°F. Normal operating temperature of the boiler bed is between 1650 and 1780°F. Generally, it takes approximately 12-14 hours from initial fuel oil firing for a cold-condition Cedar Bay CFB unit to reach full operation, and three to four hours from coal-firing initiation to full operation.

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

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

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

The DEP has requested that US Generating provide suggested permit language to clarify what is meant by startup, shutdown, and full flow reheat bypass.

It should be noted that the Federal definitions of these terms are inadequate. Under the New Source Performance Standards (NSPS) program, "startup" is defined as

> "...the setting in operation of an affected operation for any purpose";

and "shutdown" is defined as

> "...the cessation of operation of an affected facility for any purpose."

The Federal New Source Review regulations do not define "startup" or "shutdown".

Florida's air pollution control regulations (Title 62, Chapter 210.200) define "startup" as

> "...the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions."

and "shutdown" as

> "...the cessation of the operation of an emissions unit for any purpose."

The federal NSPS definitions are not considered specific enough for the purpose of modifying the Site Certification. While the Florida definition of startup is more specific than the corresponding NSPS definition, it does not set a quantifiable standard for determining when

startup has been completed and a unit is in normal operation. Therefore, CBC is proposing definitions for these terms that reflects the specific situation at the Jacksonville facility, with particular regard to establishing a measurable time or equipment-specific parameter that determines the boundaries of startup mode.

Furthermore, Title 62, Chapter 210.700(1) of the Florida regulations allows excess emissions during startup, shutdown, and malfunction so long as best operational practices are adhered to and the duration of excess emissions is minimized. In a letter dated January 29, 1996 from Mr. Morton Benjamin, Compliance/Enforcement Supervisor, Florida DEP to Mr. Timothy J. Cotner, Plant Director, CBC,

> "It is suggested that Cedar Bay request a change in their certification to allow not reporting excess emissions during start-up and [FFRB]."

However, 40 CFR 60.7(c) requires that

> "Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report ...Written reports of excess emissions shall include the following:
>
> (1)...
>
> (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility...". Therefore, we cannot recommend that Cedar Bay request a change in their certification to allow not reporting excess emissions during start-up and FFRB.

Refractory curing presents a special startup case for CBCP. When refractory is replaced during a boiler outage, it must be cured by oil firing for an extended period of time (up to 24 hours). Therefore CBC is taking special note to include the entire period of time to cure refractory in the startup definition.

Proposed Language

CBC proposes to modify Condition II.A.11.c.(2) as follows:

> (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns <u>(including those occurring due to bed cooling below 1400°F as a normal part of full flow reheat bypass)</u>, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (40 CFR 60.7(c)(2)).

CBC proposes to Add Condition II.A.9.g as follows:

g. Startup, Shutdown, and Full Flow Reheat Bypass shall be defined as follows:

(1) "Full flow reheat bypass" (FFRB) shall be defined as the mode of operation in which steam from a boiler bypasses the turbine generator by being routed from the main steam piping to the cold reheat piping and then passing this steam through both reheater sections.

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

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

CBC proposes to modify Condition No. II.A.9.a as follows:

a. CEMS data shall be recorded and reported in accordance with Chapter 62-297 (CHECK), F.A.C., and 40 CFR 60.49a and 60.7. A record shall be kept for periods of startup, shutdown, full flow reheat bypass, and malfunction.

2.2 SO2 Averaging Time

Discussion

The site certification conditions and current air permits specify a limit on SO2 emissions of 0.24 lb/MMBtu based on a 3-hour rolling average, and 0.20 lb/MMBtu based on a 12-month rolling average. According to Condition No. I.13.a of the PSD FL-137 permit, these limits constitute determination of the Best Available Control Technology (BACT). CBC proposes to modify the 3-hour rolling average to a 24-hour block average. To achieve this, CBC is prepared to accept a more stringent SO2 emission limit of 0.22 lb/MMBtu based on a 24-hour block average in lieu of the current 3-hour rolling average. Operating data presented in Appendix A demonstrates that compliance with the proposed new limit is reasonably attainable.

Operating experience at Cedar Bay has shown the three-hour limits to be more difficult to achieve because the adjustments to respond to instantaneous changes in load and/or boiler malfunctions are slower than with conventional boilers. The design of the CFBs allows the

combustion of a wider range of fuels overcoming the limiting operating conditions of other boilers. Some of the important advantages of a CFB include:

- High residence time of material on the combustion chamber, which allows combustion at the lower temperature, increasing combustion efficiency and reducing unburned carbon losses.

- Lower combustion temperatures reduce the formation of nitrogen oxides.

- Lower combustion temperature enable SO2 removal to take place at the point of combustion instead of requiring post combustion treatment, allowing lower consumption of limestone for SO2 removal.

The SO2 removal process is essentially a two-step chemical reaction. First, the calcination of limestone must occur then sulfation, the reaction with sulfur, occurs. Calcination occurs as the limestone enters the boiler and is exposed to heat. Sulfation occurs as the calcined limestone circulates with the bed material and comes into contact with the combustion fuel. The key to efficient sulfur removal is maintaining the proper ratios of fuel, limestone and ash in the bed material and maintaining the circulation of the bed material. Due to the high residence time of the solid material, a certain amount of time is required to respond to combustion upset conditions. For example, changing load requires a change in the delivery rate of both fuel and limestone to respond to the call for more or less steam. If delivery of coal is delayed at the feeders due to moisture, process control will decrease the amount of limestone delivered to the boilers. Consequently, when the moist slug of coal is released by the feeders, process control must instantaneously react, delivering additional limestone. Likewise, if limestone is held up at the limestone feeders due to moisture, the balance will swing to the coal side. These events can cause minor, temporary upsets which have on occasion been difficult to manage within the three-hour averaging time.

The boilers at Cedar Bay as originally permitted by AES had an SO2 limit of 0.6 lb/MMBtu for a three-hour period. In response to the revocation of their permits, AES proposed 0.24 lb/MMBtu for a 12-month rolling average. CBC proposed the current limit of 0.24 lb/MMBtu on a three-hour rolling average with the expectation that this was possible and more proactive. Our operating experience has shown that for the most part this is true. Typically, the SO2 limit is exceeded not more than 8% of the operating days in any given quarter; in a 299 day period analyzed, exceedances occurred on 24 days, not counting startup conditions. However, there are times that, due to the standard means of operating a CFB, the boiler emissions cannot be returned to below 0.24 lb/MMBtu within the averaging time. If the averaging time were to be increased to a 24-hour block average from a three-hour rolling average (HRA), the facility could more effectively address the conditions causing the high emissions and maintain compliance.

Averaging times for SO2 emissions are compared to other PSD utilities in the following table:

FACILITY	LB/MMBTU		LB/HR	
	LIMIT	AVERAGING TIME	LIMIT	AVERAGING TIME
Manatee	Orimulsion & HSFO 0.234 LSFO	30 DRA 1 HBA	N/A	N/A
Cedar Bay	0.24 0.20	3 HRA 12 MRA	255.1	3 HRA
Indiantown	N/A	N/A	582	24 HBA
From Title V permits under EPA review:				
Tampa Electric Co. Tampa	Non-integrated 6.5 Calculation	2 HBA 30 DRA	31.5 18.75	3 HBA 24 HBA
Seminole Electric Coop, Seminole Power Plant	1.2 (Coal)	30 DRA	N/A	N/A

Proposed Language

CBC proposed to modify Condition No. II.A.3 for SO2 (other pollutants unchanged) as follows:

Pollutant	Lbs/MMBtu	Lbs/hr	TPY	TPY for 3 CFBs
SO_2	~~0.24~~ 0.22[3] 0.20[4]	~~255.1~~ 233.8[3] --	-- 866	-- 2598

(1) *No change*

(2) *No change*

(3) ~~Three-hour rolling average.~~ 24-hour block average , except for initial and annual tests, which will be the average of three one-hour tests. 24-hour block averages are calculated as follows: At the same time each day, a 24-hour block average shall be calculated for the monitored operating hours in the previous 24 hour period. The 24-hour block average shall be determined by summing the hourly average pollutant concentrations for all valid monitored operating hours and dividing by the number of hourly average pollutant concentrations in the 24-hour period. A monitored operating hour is each hour in which fuel is fired in the combustor and at least two continuous emissions monitoring systems (CEMS) emission measurements are recorded at least 15 minutes apart. CEMS data taken during periods of: startup, shutdown, or malfunction, when fuel is not fired in the unit, during CEMS quality assurance checks or when the CEMS is out of control shall be excluded from the 24-hour block average.

(4) *No change*

2.3 CFB Test Methods

Discussion

Currently, the permit requires, in part, the following test methods:

Condition	Pollutant	Method per 40 CFR Part 60 or 61
II.A.8.f(5)	Particulate Matter (PM)	Method 5 or 17
II.A.B.f(11)	Lead (Pb)	Method 12
II.A.B.f(15)	Mercury (Hg)	Method 101A
II.A.B.f(16)	Beryllium (Be)	Method 104

As published in the Federal Register (61 FR 18262, April 25, 1996), Method 29 (40 CFR 60 Appendix A) may be used to determine the above metals in addition to particulate matter. Using Method 29 would reduce the time and cost needed for conducting separate tests. Further, FDEP has accepted Method 29 as a valid method since these conditions were developed in the original permit.

Proposed Language

CBC proposes to modify Condition II.A.8.f as follows:

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

2.4 Mercury Testing

Discussion:

In a letter from Hamilton Oven to Don Beckham, dated April 6, 1995, Mr. Oven stated that the requirements of Condition No. II.A.1.h (PSD FL-137 Condition II.A.2(c)) were met and that no further testing of mercury removal efficiency were required.

Proposed Modification

CBC therefore proposes to delete Condition No. II.A.1.h. in entirety.

2.5 Short Fiber Rejects

Due to changes in the relationship with the Smurfit-Stone Container Corporation facility, and Cedar Bay's need to identify conditions under which Cedar Bay is able to establish an acceptable disposal or beneficial re-use site for the ash resulting from such burns, Cedar Bay is proposing to modify Condition II.A.1.h as follows:

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

2.6 Material Handling

The current permit places monthly usage limits on material handling sources, including the unloading of coal and limestone and the storage thereof. Coal and limestone (aragonite) are staged in storage piles at the plant. The coal pile was originally designed to hold a 30-day supply of coal. Limitations created by stormwater runoff design render the storage capacity to about 27 days. Theoretically, the plant could consume the entire storage pile one month, then build it back up the next month while running at full capacity. This would mean that, in one months' time, twice the boiler capacity of coal could be "handled" at the unloading building and the storage pile.

Given that:

- coal unloading and storage, as well as aragonite unloading and storage, represent fugitive particulate emissions for which no emission rate limits are set;
- there is no federal or state regulation limiting the quantities of these materials or emissions therefrom on a monthly basis; and
- compliance with a rigorous interpretation of the current monthly conditions would, in theory, render the storage piles to be eventually depleted if the boilers ran at full capacity for an extended period;

CBC would therefore like to see the monthly limitations for coal and aragonite unloading and storage removed, or at least doubled, and the annual usage rate increased by one month's capacity. This would require separating the limits for these sources from the other material handling sources.

Thus, CBC proposes to modify Condition II.B.2 as follows:

2. Material Handling and Usage Rates

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

	Unloading/Storage Handling/Usage Rate	
Material	TPM	TPY
Coal	234,000	1,287,000
Limestone/Aragonite	54,000	347,000

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

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

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

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR JANUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:56

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.25	92.2	0.15	0.16#	3640.8	166.0#	26.8	0.026	645	84.7	0.19	4676.0
02	13.05	100.1	0.16	0.16D#	3425.5	166.0D#	29.6	0.030	614	82.7	0.19	3913.1
03	13.05	104.4	0.17	0.16#	4041.8	166.6#	19.5	0.020	454	73.6	0.17	3920.9
04	12.75	69.2	0.12	0.16#	2913.8	165.2#	28.6	0.029	722	68.8	0.16	3978.3
05	13.15	87.0	0.14	0.16#	3627.9	165.2#	30.6	0.030	774	69.5	0.16	4011.6
06	12.91	83.9	0.14	0.16#	3474.0	164.1#	32.9	0.033	825	78.4	0.18	4490.6
07	13.14	96.7	0.16	0.16#	3453.6	164.1#	32.7	0.033	711	85.1	0.19	4226.5
08	13.12	94.6	0.15	0.16#	3940.7	164.8#	34.7	0.034	878	78.9	0.18	4611.4
09	12.55	82.3	0.14	0.16#	3493.4	163.6#	44.0	0.047	1095	63.9	0.15	3795.5
10	12.27	53.6	0.09	0.15	2259.2	161.0	58.3	0.063	1310	59.9	0.14	3434.7
11	12.49	76.6	0.13	0.15	3237.0	159.9	46.0	0.048	1146	65.8	0.16	3829.1
12	12.50	77.6	0.13	0.15	3108.5	158.3	50.8	0.053	1180	75.0	0.18	4106.7
13	12.71	81.6	0.14	0.15	3347.2	157.0	55.3	0.058	1224	72.0	0.17	4074.2
14	12.79	86.2	0.14	0.15	3565.0	156.6	48.7	0.050	1121	67.8	0.16	3909.5
15	12.67	70.9	0.12	0.15	2893.7	154.7	55.3	0.059	1172	62.8	0.14	3634.2
16	12.77	88.2	0.15	0.15	3684.6	153.7	39.8	0.041	995	65.6	0.15	3812.4
17	12.65	87.5	0.15	0.15	3748.1	153.5	50.6	0.053	1307	53.5	0.12	3159.9
18	12.79	87.6	0.15	0.15	3609.8	152.7	50.6	0.052	1270	66.6	0.15	3818.8
19	12.94	88.6	0.15	0.15	3544.6	151.9	54.3	0.055	1287	68.8	0.16	3829.9
20	12.89	87.1	0.14	0.14	3468.8	150.9	57.8	0.059	1326	65.1	0.15	3583.7
21	12.61	57.7	0.10	0.14	2191.0	148.5	73.4	0.076	1642	44.2	0.10	2440.6
22	13.06	73.1	0.12	0.14	2868.0	146.8	87.1	0.090	1844	59.5	0.13	3260.6
23	12.89	81.5	0.13	0.14	3227.3	146.5	71.1	0.074	1537	60.0	0.13	3383.7
24	12.65	86.4	0.15	0.14	3351.0	145.9	74.9	0.078	1623	47.8	0.11	2778.8
25	12.51	78.1	0.13	0.14	3115.5	146.0	77.0	0.081	1748	65.8	0.16	3528.2
26	12.58	75.9	0.13	0.14	3016.4	144.3	63.0	0.066	1382	69.5	0.16	3785.7
27	12.94	86.3	0.14	0.14	3488.6	142.9	52.3	0.053	1179	79.5	0.18	4389.4
28	12.50	65.7	0.11	0.14	2121.2	140.7	67.7	0.072	1222	56.7	0.13	2433.6
29	12.72	87.8	0.15	0.14	3540.3	139.9	50.4	0.052	1243	73.8	0.17	4197.7
30	12.77	78.8	0.13	0.14D	2934.9	139.9D	68.9	0.071	1456	69.0	0.16	3507.7
31	12.77	77.2	0.13	0.14	3080.1	138.8	62.8	0.065	1446	69.0	0.16	3802.9
AVG	12.79	82.1	0.14		3271.4		51.5	0.053	1173	67.8	0.16	3752.4
TONS YTD					50.7				18			58

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 22 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR JANUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:56

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.41	85.3	0.15	0.15	3306.4	149.8	20.6	0.022	483	71.2	0.17	3814.0
02	12.45	97.1	0.17	0.15D	3198.2	149.8D	30.2	0.032	604	75.5	0.18	3468.0
03	12.64	93.4	0.16	0.15	3404.0	150.1	22.5	0.023	501	78.4	0.19	3999.7
04	12.31	91.9	0.16	0.16#	3618.9	150.4	34.5	0.037	821	65.9	0.16	3625.1
05	12.19	103.5	0.20	0.16#	3511.8	151.2	40.4	0.055	893	70.6	0.17	2932.8
06	12.49	84.1	0.14	0.16#	3145.5	151.1	29.4	0.031	671	76.4	0.18	3442.0
07	12.73	90.7	0.15	0.16#	3584.8	151.0	30.9	0.032	735	83.1	0.19	4536.6
08	12.69	94.1	0.16	0.16#	3722.0	151.0	32.5	0.033	787	87.8	0.21	4852.4
09	12.56	95.8	0.16	0.16#	3748.8	151.9	43.6	0.046	987	70.9	0.17	3844.9
10	12.26	59.7	0.10	0.15	2424.3	149.5	53.9	0.058	1078	66.0	0.16	3565.9
11	12.28	79.0	0.14	0.15	3159.8	148.8	32.1	0.034	774	75.7	0.18	4164.0
12	12.43	76.1	0.13	0.15	2894.7	147.8	39.8	0.042	866	76.0	0.18	3929.8
13	12.50	76.4	0.13	0.15	2878.0	146.7	45.9	0.049	941	75.2	0.18	3890.9
14	12.24	71.8	0.12	0.15	2810.2	145.4	53.0	0.058	1121	68.4	0.17	3695.9
15	12.24	77.3	0.13	0.15	2976.6	144.0	49.2	0.054	986	63.1	0.15	3435.3
16	11.94	88.4	0.16	0.15D	3117.0	144.0D	69.9	0.125	1362	84.9	0.20	4195.9
17	12.25	89.2	0.16	0.15	3645.6	143.8	32.3	0.035	801	57.1	0.14	3270.6
18	12.56	85.7	0.15	0.15	3424.8	143.4	28.3	0.030	687	76.8	0.18	4263.2
19	12.38	79.0	0.14	0.15	2967.5	142.3	31.5	0.033	703	68.6	0.17	3568.7
20	12.34	80.2	0.14	0.15	2969.8	140.9	35.6	0.038	760	71.1	0.17	3603.8
21	12.37	75.6	0.13	0.15	2782.9	139.9	39.5	0.042	836	62.2	0.15	3189.7
22	12.18	67.3	0.12	0.15	2474.7	138.9	52.6	0.058	1064	68.0	0.17	3479.3
23	12.40	69.7	0.12	0.14	2586.3	137.5	60.6	0.067	1209	79.0	0.19	4016.1
24	12.03	81.8	0.14	0.14	3040.0	137.3	65.4	0.073	1319	52.5	0.13	2874.8
25	11.93	76.6	0.14	0.14	2849.7	136.3	69.8	0.079	1453	53.9	0.13	2806.9
26	12.08	73.6	0.13	0.14	2744.3	135.2	55.2	0.061	1121	63.5	0.15	3346.2
27	12.27	86.3	0.15	0.14	3266.3	134.5	48.7	0.053	1021	80.2	0.19	4215.3
28	11.99	69.2	0.12	0.14	2554.5	132.7	59.0	0.066	1201	64.9	0.16	3340.2
29	12.39	87.9	0.15	0.14	3161.1	132.1	47.3	0.051	1085	69.9	0.17	3335.8
30	12.34	79.7	0.14	0.14	2980.0	131.1	37.5	0.040	790	75.7	0.18	3849.2
31	12.37	73.4	0.13	0.14	2833.8	130.6	37.7	0.040	817	72.8	0.18	3773.1
AVG	12.33	81.9	0.14		3089.8		42.9	0.048	919	71.1	0.17	3687.9
TONS YTD					47.9				14			57

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 22 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR JANUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:56

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.42	84.4	0.15	0.16#	3239.7	155.8	24.2	0.025	567	73.5	0.18	3961.8
02	12.71	99.2	0.17	0.16D#	3210.6	155.8D	28.4	0.029	560	77.3	0.18	3507.6
03	12.99	99.0	0.16	0.16#	3567.9	155.8	26.6	0.027	574	74.1	0.17	3731.4
04	12.52	87.6	0.15	0.16#	3522.8	155.7	35.7	0.038	861	62.5	0.15	3483.8
05	12.94	100.9	0.17	0.16#	3974.5	156.5	28.3	0.029	678	77.4	0.18	4253.3
06	12.85	90.1	0.15	0.16#	3515.9	156.1	28.1	0.029	666	74.1	0.17	4038.3
07	13.04	98.0	0.16	0.16#	3840.3	156.0	31.2	0.031	742	87.8	0.20	4790.8
08	13.01	91.2	0.15	0.16#	3646.6	156.4	32.3	0.032	793	83.3	0.19	4631.6
09	12.72	92.6	0.15	0.16#	3693.6	155.9	38.7	0.041	918	71.2	0.17	3961.2
10	12.30	63.9	0.11	0.16#	2540.5	154.6	48.6	0.054	1040	64.6	0.15	3537.3
11	12.39	81.0	0.14	0.16#	3265.6	153.6	26.5	0.028	643	65.0	0.16	3645.8
12	12.61	87.4	0.15	0.15	3376.2	152.5	33.4	0.035	757	72.5	0.17	3918.4
13	12.41	76.7	0.13	0.15	2955.6	150.6	43.5	0.047	943	66.9	0.16	3663.9
14	12.50	76.8	0.13	0.15	2983.7	148.5	49.0	0.053	1070	63.7	0.15	3449.6
15	12.51	86.0	0.15	0.15	3224.9	147.5	49.7	0.054	1001	63.8	0.15	3497.7
16	12.74	78.9	0.13	0.15	3127.9	146.8	35.2	0.037	839	70.1	0.16	3860.1
17	12.78	86.1	0.15	0.15	3518.0	146.5	36.2	0.037	895	68.5	0.16	3873.2
18	12.66	92.1	0.16	0.15	3689.4	146.2	34.7	0.036	843	65.8	0.15	3647.0
19	12.76	88.4	0.15	0.15	3399.4	145.9	35.4	0.037	812	69.4	0.16	3708.5
20	12.46	87.0	0.15	0.15	3369.8	145.1	41.4	0.044	921	66.0	0.16	3553.6
21	12.34	77.8	0.13	0.15	2910.5	143.8	50.6	0.054	1094	53.7	0.13	2802.4
22	12.84	91.7	0.15	0.15	3378.7	143.2	54.0	0.057	1117	73.4	0.17	3739.0
23	12.82	72.8	0.12	0.15	2677.5	141.9	65.3	0.070	1353	70.0	0.16	3687.6
24	12.02	82.5	0.15	0.15	3056.2	141.3	80.1	0.090	1634	46.4	0.11	2535.1
25	11.89	77.9	0.14	0.15	2902.6	141.1	78.0	0.088	1632	47.7	0.12	2530.5
26	12.42	80.6	0.14	0.15	3054.4	139.9	50.9	0.055	1090	71.0	0.17	3802.5
27	12.69	83.7	0.14	0.14	3169.2	139.0	49.6	0.053	1092	73.3	0.17	3913.1
28	12.29	77.5	0.13	0.14	2911.2	137.8	54.3	0.059	1164	57.3	0.14	2997.1
29	12.83	95.0	0.16	0.14	3710.0	137.7	36.1	0.037	857	70.1	0.16	3813.3
30	12.48	82.6	0.14	0.14	2940.8	137.0	48.0	0.052	989	64.7	0.15	3203.1
31	12.51	88.9	0.15	0.14	3361.7	137.2	35.8	0.038	798	65.6	0.15	3508.4
AVG	12.60	85.8	0.15		3281.8		42.3	0.045	934	68.1	0.16	3653.1
TONS YTD					50.9				14			57

12-MONTH ROLLING AVG 0.15SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 22 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR FEBRUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:57

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.76	82.9	0.14	0.14	3275.5	138.1	59.2	0.061	1370	69.6	0.16	3868.7
02	12.80	79.6	0.13	0.14	2932.5	137.1	81.9	0.086	1689	49.5	0.11	2624.4
03	12.72	84.7	0.14	0.13	3220.2	135.8	69.3	0.073	1504	42.8	0.09	2415.4
04	12.59	78.7	0.13	0.14	3053.6	136.0	76.9	0.082	1634	40.6	0.09	2319.7
05	12.63	71.1	0.12	0.13	2590.7	134.5	97.6	0.104	1975	39.6	0.09	2041.1
06	13.22	91.8	0.15	0.13	3681.9	134.8	57.0	0.056	1360	72.2	0.16	4073.5
07	13.03	78.4	0.13	0.13	3238.8	133.9	44.3	0.044	1113	73.7	0.17	4237.3
08	12.86	95.0	0.16	0.13	3931.7	133.9	41.2	0.042	1020	68.0	0.16	3904.4
09	12.82	74.5	0.12	0.13	2855.8	133.0	57.8	0.059	1289	50.2	0.12	2764.9
10	12.94	87.1	0.14	0.14	3531.7	134.8	45.8	0.047	1113	68.8	0.16	3964.9
11	12.73	69.6	0.12	0.13	2750.5	134.1	57.7	0.060	1325	46.3	0.11	2606.6
12	12.49	69.4	0.12	0.13	2761.4	133.6	85.1	0.093	1858	49.6	0.11	2866.3
13	12.69	75.0	0.13	0.13	3002.0	133.2	73.2	0.077	1615	52.5	0.12	2909.4
14	12.63	79.6	0.13	0.13	3000.8	132.4	91.0	0.096	1906	41.6	0.10	2229.4
15	12.52	57.3	0.10	0.13	2021.4	131.1	116.4	0.123	2305	22.4	0.05	1181.3
16	12.99	80.8	0.13	0.13	3166.8	130.4	98.9	0.103	2086	40.8	0.09	2299.9
17	12.39	90.2	0.15	0.13	3386.5	129.9	75.2	0.079	1691	20.4	0.04	1141.7
18	12.34	66.6	0.12	0.13	2565.5	128.5	55.0	0.059	1194	55.4	0.13	3078.3
19	12.82	80.8	0.14	0.13	3226.1	128.2	48.3	0.049	1165	62.5	0.15	3509.2
20	13.28	99.2	0.16	0.13	4124.9	129.1	40.3	0.040	1017	68.1	0.15	3937.1
21	12.96	93.6	0.16	0.13	3842.2	131.4	59.4	0.060	1463	62.9	0.14	3663.6
22	12.85	83.1	0.14	0.13	3327.2	132.1	52.1	0.054	1233	55.0	0.13	3152.2
23	13.16	108.2	0.16	0.13	-26177720.0	133.2	50.8	0.041	-26180640	88.6	0.17	-26177480.0
24	12.94	92.4	0.15	0.14	3732.3	133.7	47.4	0.048	1158	67.6	0.15	3839.4
25	12.73	95.0	0.16	0.14	3735.1	134.6	67.3	0.072	1501	54.0	0.12	3094.9
26	12.93	91.8	0.15	0.14	3549.7	135.4	59.5	0.062	1309	66.6	0.15	3706.8
27	12.92	88.5	0.15	0.14	3330.0	135.1	59.1	0.061	1275	57.2	0.13	3142.6
28	12.82	69.8	0.12	0.14	2770.8	135.3	74.3	0.078	1666	50.2	0.11	2893.1
AVG	12.81	82.7	0.14		-931825.5		65.8	0.068	-933600	54.9	0.12	-932000.5
TONS YTD					96.0				39			101

12-MONTH ROLLING AVG 0.15SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 25 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR FEBRUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:57

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.13	74.1	0.13	0.14	2835.4	129.8	40.5	0.044	892	57.9	0.14	3069.9
02	12.06	65.4	0.11	0.14	2380.5	128.5	68.6	0.078	1316	41.3	0.10	2181.9
03	12.15	66.3	0.12	0.14	2506.1	127.1	72.6	0.082	1412	53.0	0.13	2847.5
04	12.15	69.6	0.12	0.14	2600.3	125.6	73.9	0.083	1429	52.2	0.12	2733.4
05	12.39	67.7	0.12	0.13	2463.6	123.3	71.6	0.078	1350	57.1	0.13	2904.1
06	12.70	88.0	0.15	0.13	3423.9	123.5	37.2	0.038	858	81.5	0.19	4341.6
07	12.34	96.8	0.17	0.13	3887.4	123.9	33.8	0.036	819	71.5	0.17	4003.5
08	12.45	100.0	0.17	0.13	4026.6	124.4	29.6	0.031	726	67.6	0.16	3794.5
09	12.11	82.0	0.14	0.13	3166.7	123.6	47.5	0.052	1037	62.4	0.15	3369.2
10	12.39	78.3	0.13	0.14	3057.5	124.4	35.9	0.038	837	62.2	0.15	3406.1
11	11.97	70.6	0.13	0.13	2743.6	123.9	40.6	0.046	853	57.5	0.14	3128.2
12	12.21	81.9	0.14	0.14	2969.4	124.0	41.3	0.047	804	54.7	0.13	2867.1
13	11.79	81.4	0.15	0.14	3105.4	124.3	44.1	0.050	927	50.0	0.12	2737.7
14	11.81	75.5	0.14	0.14	2779.9	124.2	53.4	0.061	1069	51.1	0.13	2530.3
15	11.68	60.6	0.11	0.14	2003.1	122.9	60.5	0.069	1110	46.2	0.12	2131.5
16	12.30	80.7	0.14	0.13	2994.7	122.0	51.7	0.057	1012	62.7	0.15	3110.4
17	11.82	62.0	0.11	0.13	2319.2	120.4	43.3	0.049	941	26.3	0.06	1435.5
18	11.51	85.1	0.16	0.13	3283.7	120.9	41.7	0.050	923	41.4	0.10	2272.1
19	12.17	95.0	0.17	0.14	3689.3	122.0	39.2	0.042	893	64.8	0.16	3387.3
20	12.67	91.2	0.15	0.14	3764.2	123.4	28.5	0.029	716	68.8	0.16	3968.7
21	12.14	83.7	0.15	0.14	3379.0	124.7	38.4	0.042	929	57.8	0.14	3285.6
22	12.00	82.2	0.15	0.14	3253.9	125.6	37.5	0.042	882	58.3	0.14	3221.0
23	12.41	90.2	0.16	0.14	3629.8	126.4	32.2	0.034	788	67.0	0.16	3762.6
24	12.28	95.5	0.17	0.14	3847.2	127.8	37.0	0.040	895	61.4	0.14	3432.3
25	12.02	98.5	0.17	0.14	3905.8	129.4	46.0	0.053	1003	58.4	0.14	3275.7
26	12.22	80.6	0.14	0.14	3022.5	129.1	41.6	0.047	867	67.1	0.16	3577.7
27	12.21	81.2	0.14	0.14	2966.7	129.7	48.8	0.055	1006	52.9	0.12	2809.7
28	12.47	73.8	0.13	0.14	2834.2	128.9	44.9	0.049	972	57.4	0.13	3130.5
AVG	12.16	80.6	0.14		3101.4		45.8	0.051	974	57.5	0.14	3097.0
TONS YTD					91.3				28			101
12-MONTH ROLLING AVG												0.15SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 25 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR FEBRUARY 1998
REPORTING DATE, TIME: 01/15/1999, 09:57

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.58	75.0	0.13	0.14	2839.8	136.7	40.7	0.044	896	57.5	0.13	3116.9
02	12.60	66.0	0.11	0.14	2394.9	134.8	73.4	0.079	1413	48.1	0.11	2494.5
03	12.68	75.2	0.13	0.14	2773.5	133.8	76.3	0.083	1556	52.7	0.12	2854.7
04	12.72	87.1	0.14	0.14	3230.6	132.8	78.3	0.084	1596	48.9	0.11	2652.6
05	12.59	69.7	0.12	0.14	2495.9	131.3	82.4	0.089	1594	54.9	0.12	2813.3
06	12.93	87.5	0.14	0.14	3328.0	130.6	45.8	0.047	1051	73.4	0.17	3913.8
07	13.03	94.8	0.16	0.14	3679.9	130.7	41.2	0.041	964	73.5	0.17	3958.2
08	13.02	111.4	0.18	0.14	4271.5	131.5	40.0	0.040	924	69.2	0.16	3728.1
09	12.72	91.1	0.15	0.14	3282.6	132.5	49.7	0.052	1060	56.4	0.13	2945.4
10	12.97	88.1	0.15	0.14	3350.6	132.6	35.4	0.036	809	71.2	0.16	3809.5
11	12.85	84.5	0.14	0.14	3149.6	132.3	48.7	0.053	1032	61.7	0.14	3300.9
12	12.73	83.5	0.14	0.14	3036.6	132.4	58.6	0.064	1212	52.8	0.12	2855.0
13	12.66	91.9	0.15	0.14	3415.2	133.0	49.4	0.054	1033	53.3	0.12	2856.5
14	12.34	87.9	0.15	0.14	3151.1	132.9	61.9	0.068	1242	42.8	0.10	2213.5
15	11.83	74.6	0.13	0.14	2465.5	132.0	74.6	0.085	1430	33.4	0.08	1674.3
16	12.59	65.6	0.11	0.14	2408.9	130.5	63.4	0.070	1300	60.3	0.14	3133.4
17	12.12	80.0	0.14	0.14	2867.3	129.3	58.8	0.064	1218	34.1	0.08	1823.0
18	12.28	95.2	0.16	0.14	3554.8	129.5	58.4	0.067	1198	52.0	0.12	2775.5
19	12.80	96.9	0.16	0.14	3649.2	130.1	42.8	0.044	978	64.9	0.15	3425.6
20	10.86	99.0	0.19	0.14D	2757.3	130.1D	197.1	0.723	2444	40.0	0.09	1625.4
21	12.85	76.0	0.13	0.14	2959.6	130.2	50.4	0.052	1168	61.8	0.14	3369.8
22	12.82	88.5	0.15	0.14	3378.1	130.2	42.6	0.044	971	55.6	0.13	3000.4
23	13.26	93.6	0.15	0.14	3607.4	131.5	39.3	0.039	927	72.4	0.16	3917.8
24	13.09	94.1	0.16	0.14	3686.5	132.3	44.3	0.045	1041	66.3	0.15	3605.6
25	13.01	99.1	0.16	0.14	3696.0	133.5	57.6	0.061	1222	63.2	0.14	3453.9
26	13.21	91.4	0.15	0.14	3317.3	133.8	54.1	0.057	1105	68.6	0.15	3579.9
27	13.03	85.8	0.14	0.14	3053.8	133.7	57.7	0.061	1177	51.3	0.11	2660.5
28	12.94	67.8	0.11	0.14	2461.9	133.0	64.5	0.069	1374	57.7	0.12	3071.1
AVG	12.68	85.8	0.14		3152.3		60.3	0.083	1212	57.1	0.13	3022.5
TONS YTD					95.0				31			99
12-MONTH ROLLING AVG												0.14SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 25 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR MARCH 1998
REPORTING DATE, TIME: 01/15/1999, 09:59

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.82	69.8	0.12	0.14	2748.4	134.2	74.2	0.077	1658	55.9	0.13	3120.6
02	12.79	71.8	0.12	0.14	2834.4	133.8	75.0	0.078	1641	54.7	0.13	3006.8
03	12.86	82.4	0.14	0.14	3283.5	133.9	63.2	0.065	1474	62.2	0.14	3429.5
04	13.03	93.7	0.15	0.14	3723.1	135.0	64.3	0.065	1510	67.2	0.15	3666.0
05	13.06	90.7	0.15	0.14	3683.3	135.6	51.0	0.051	1255	68.7	0.16	3919.1
06	12.95	84.4	0.14	0.14	3257.3	135.9	67.7	0.069	1411	50.9	0.12	2736.2
07	12.95	75.2	0.12	0.14	2846.1	136.2	72.8	0.075	1514	48.9	0.11	2752.8
08	13.28	79.6	0.13	0.14	3036.1	135.3	75.2	0.075	1664	47.2	0.10	2597.7
09	13.11	88.2	0.14	0.14	3518.6	135.7	66.1	0.067	1581	52.2	0.11	2960.4
10	12.85	85.9	0.14	0.14	3518.2	135.2	68.7	0.071	1614	51.8	0.12	3020.8
11	13.26	92.4	0.15	0.14	3922.3	136.6	43.0	0.042	1112	69.5	0.16	4114.4
12	13.02	95.2	0.16	0.14	4075.0	137.4	38.3	0.039	995	69.7	0.16	4142.3
13	13.17	91.0	0.15	0.14	3833.9	138.9	38.0	0.038	975	74.6	0.17	4364.4
14	13.11	87.0	0.14	0.14	3603.3	140.1	48.2	0.048	1212	73.7	0.17	4262.2
15	12.85	76.7	0.13	0.14	3088.2	140.2	49.1	0.050	1182	43.5	0.10	2518.2
16	12.04	63.8	0.11	0.14	2387.4	139.3	84.0	0.092	1765	47.0	0.11	2547.1
17	12.31	66.5	0.12	0.14	2364.8	139.8	96.1	0.103	1930	52.1	0.13	2527.7
18	12.44	72.5	0.13	0.14	2469.7	138.9	64.3	0.067	1279	69.9	0.17	3245.2
19	12.44	95.9	0.16	0.14	3179.9	138.6	70.3	0.075	1333	64.4	0.15	2937.5
20	11.81	71.1	0.13	0.14	2348.6	138.3	89.9	0.105	1612	49.9	0.12	2457.5
21	12.46	69.3	0.12	0.14	2434.2	137.0	98.2	0.104	1964	68.7	0.16	3280.6
22	12.41	67.9	0.12	0.14	2235.8	134.3	104.6	0.114	1968	63.3	0.15	2926.1
23	12.01	88.8	0.16	0.14	3175.1	133.4	97.0	0.109	1927	58.7	0.14	2929.4
24	12.11	86.6	0.15	0.14	3033.8	133.0	89.4	0.098	1813	66.1	0.16	3179.0
25	13.02	91.5	0.15	0.14	3102.8	131.7	86.9	0.087	1777	80.3	0.18	3765.2
26	12.25	75.1	0.13	0.14	1824.2	130.3	105.5	0.120	1384	63.3	0.15	2083.6
27	12.80	85.5	0.14	0.14	3104.9	129.4	83.4	0.085	1766	76.0	0.18	3767.3
28	12.82	82.6	0.14	0.14	2921.4	128.5	81.7	0.084	1701	78.9	0.18	3825.7
29	12.92	89.4	0.15	0.14	3141.7	128.3	77.1	0.078	1587	79.0	0.18	3812.9
30	12.90	86.0	0.14	0.14	2945.9	128.5	84.9	0.086	1725	73.5	0.17	3496.2
31	13.18	99.2	0.16	0.14	3421.1	129.7	63.2	0.063	1305	80.7	0.18	3912.3
AVG	12.74	82.4	0.14		3066.5		73.3	0.077	1537	63.3	0.15	3267.9
TONS YTD					143.5				62			152
12-MONTH ROLLING AVG												0.16SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 28 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR MARCH 1998
REPORTING DATE, TIME: 01/15/1999, 09:59

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.19	67.0	0.12	0.14	2554.1	128.3	42.8	0.047	916	59.6	0.14	3132.9
02	12.30	82.0	0.14	0.14	3147.4	128.7	42.1	0.046	895	67.1	0.16	3521.5
03	12.50	88.3	0.15	0.14D	3107.5	128.7D	43.6	0.046	879	71.9	0.17	3446.2
04	12.10	81.1	0.14	0.14	3142.9	129.1	40.3	0.044	912	66.7	0.16	3602.5
05	12.25	88.3	0.15	0.14	3500.4	130.7	28.6	0.031	683	65.1	0.16	3634.0
06	12.14	75.0	0.13	0.14	2765.2	131.0	47.1	0.053	967	53.1	0.13	2861.3
07	12.30	76.6	0.13	0.14	2839.1	131.4	53.5	0.059	1061	49.1	0.11	2608.7
08	12.05	80.9	0.14	0.14	3110.1	132.3	45.9	0.050	1002	58.2	0.14	3151.0
09	12.01	85.2	0.15	0.14	3455.4	132.3	44.7	0.050	1055	54.0	0.13	3089.2
10	11.69	72.4	0.13	0.14	2955.5	131.0	48.6	0.055	1115	52.7	0.13	3043.7
11	11.53	89.5	0.17	0.14	3952.4	130.9	24.6	0.028	653	69.6	0.18	4273.9
12	11.95	81.7	0.15	0.14	3443.4	131.3	23.6	0.026	606	65.5	0.16	3864.8
13	11.81	85.5	0.16	0.14	3657.5	132.1	22.0	0.024	571	68.7	0.17	4076.6
14	11.59	85.4	0.16	0.14	3663.9	133.4	26.2	0.030	679	66.4	0.17	3966.0
15	11.32	71.5	0.13	0.14	3006.6	133.5	27.6	0.032	693	52.2	0.14	3105.6
16	11.28	58.2	0.11	0.14	2285.4	132.3	45.7	0.054	999	53.8	0.14	2815.6
17	11.64	51.7	0.09	0.14	1908.7	131.1	56.4	0.064	1140	60.8	0.16	3055.3
18	11.71	55.6	0.10	0.14	1970.3	131.1	52.9	0.059	1077	58.5	0.15	2822.1
19	11.39	71.2	0.13	0.14	2492.8	130.4	52.2	0.061	1071	55.3	0.14	2751.1
20	10.92	55.0	0.11	0.14	1931.5	129.8	95.5	0.126	1887	50.4	0.13	2569.0
21	11.86	74.0	0.13	0.14	2671.0	129.0	67.0	0.076	1415	62.6	0.15	3126.8
22	12.02	68.5	0.12	0.14	2263.3	126.8	71.9	0.082	1380	62.7	0.15	2928.9
23	11.97	73.5	0.13	0.14	2500.4	125.1	83.7	0.099	1585	61.8	0.15	2970.6
24	11.99	76.6	0.14	0.14	2638.3	124.0	64.4	0.072	1298	65.8	0.16	3254.8
25	12.19	80.4	0.14	0.14	2785.2	123.4	58.0	0.062	1209	71.5	0.18	3426.8
26	11.59	86.1	0.16	0.14	3131.1	122.7	65.6	0.078	1330	60.7	0.15	3125.6
27	11.58	72.5	0.13	0.14	2677.6	121.1	39.4	0.044	848	68.7	0.18	3503.2
28	11.34	57.5	0.11	0.13	2112.8	118.6	57.7	0.067	1240	66.5	0.18	3364.1
29	11.67	80.0	0.15	0.13	2829.5	118.3	54.7	0.061	1171	73.0	0.19	3615.7
30	11.86	79.6	0.14	0.13	2836.7	118.1	59.6	0.066	1259	70.5	0.18	3438.1
31	11.76	67.9	0.12	0.13	2405.2	117.5	34.0	0.038	727	63.9	0.16	3125.8
AVG	11.82	74.8	0.13		2830.4		49.0	0.056	1043	62.1	0.15	3266.8
TONS YTD					135.2				44			151

12-MONTH ROLLING AVG 0.15SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 28 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR MARCH 1998
REPORTING DATE, TIME: 01/15/1999, 09:59

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.67	73.7	0.12	0.14	2715.7	131.6	60.9	0.065	1281	50.7	0.11	2691.2
02	12.50	98.7	0.17	0.14	3791.5	132.6	56.0	0.061	1171	51.4	0.12	2852.3
03	12.53	73.4	0.13	0.14	2600.6	132.0	39.6	0.042	814	62.7	0.15	3077.1
04	12.37	73.5	0.13	0.14	2827.6	131.9	43.1	0.046	969	61.7	0.15	3304.2
05	12.97	86.6	0.14	0.14	3254.8	133.1	41.5	0.042	957	68.3	0.16	3602.2
06	12.89	77.6	0.13	0.14	2790.5	133.2	66.7	0.070	1327	54.6	0.12	2824.8
07	12.93	86.7	0.14	0.14	3114.5	133.0	62.2	0.065	1219	50.8	0.11	2667.4
08	13.16	83.1	0.13	0.14	3009.5	133.7	53.1	0.054	1127	62.5	0.14	3232.9
09	12.75	87.5	0.15	0.14	3439.6	133.9	42.5	0.044	996	57.4	0.13	3220.8
10	12.54	95.3	0.16	0.14	3718.2	133.9	43.8	0.047	988	55.1	0.13	3120.6
11	12.79	101.1	0.17	0.14	4144.4	133.7	30.1	0.031	748	72.5	0.17	4127.9
12	12.97	95.5	0.16	0.14	3859.0	134.6	28.2	0.028	689	77.8	0.18	4327.5
13	12.98	91.6	0.15	0.14	3681.3	135.0	27.2	0.027	654	76.4	0.18	4247.1
14	13.23	96.8	0.16	0.14	3811.3	135.9	27.8	0.027	670	78.6	0.18	4309.9
15	12.67	81.6	0.14	0.14	3130.6	136.1	28.1	0.029	648	56.6	0.13	3080.0
16	11.83	74.0	0.13	0.14	2715.0	135.1	63.7	0.071	1347	35.3	0.09	1891.0
17	12.22	65.6	0.11	0.14	2283.8	133.9	72.7	0.079	1444	61.7	0.15	2966.8
18	12.54	68.0	0.12	0.14	2281.9	133.6	53.6	0.056	1044	69.3	0.16	3149.7
19	12.27	76.7	0.13	0.14	2553.8	133.8	59.1	0.064	1137	60.6	0.15	2822.3
20	11.65	77.2	0.14	0.14	2610.6	133.5	97.6	0.118	1820	60.9	0.15	2912.8
21	12.71	81.4	0.14	0.14	2774.6	132.4	82.0	0.086	1603	68.2	0.16	3240.6
22	12.74	79.1	0.13	0.14	2471.2	130.6	78.3	0.083	1412	61.2	0.14	2760.4
23	12.61	87.5	0.15	0.14	2870.6	130.4	83.2	0.091	1488	66.5	0.15	3084.8
24	12.24	88.1	0.15	0.14	3027.7	129.9	65.2	0.071	1290	56.1	0.13	2795.2
25	12.67	94.6	0.16	0.14	3239.8	129.4	55.7	0.057	1154	77.1	0.18	3649.9
26	11.63	95.1	0.18	0.14	3486.1	129.2	77.3	0.091	1556	56.2	0.14	2881.5
27	12.21	82.0	0.14	0.14	3079.8	128.3	57.3	0.062	1269	73.7	0.18	3819.4
28	12.20	69.2	0.12	0.14	2559.0	127.2	54.8	0.059	1202	72.4	0.18	3675.7
29	12.46	66.9	0.11	0.14	2403.6	126.3	53.6	0.056	1144	75.3	0.18	3759.8
30	12.19	74.1	0.13	0.14	2726.1	126.7	50.7	0.055	1087	65.9	0.16	3296.9
31	12.38	82.5	0.14	0.14	3145.9	127.3	37.6	0.040	876	77.4	0.18	4069.0
AVG	12.53	82.7	0.14		3036.1		54.6	0.059	1133	63.7	0.15	3273.0
TONS YTD					142.1				49			150

12-MONTH ROLLING AVG 0.14SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 28 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR APRIL 1998
REPORTING DATE, TIME: 01/15/1999, 10:00

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.18	76.3	0.12	0.14	2833.1	129.6	53.8	0.053	1217	73.2	0.17	3792.9
02	12.71	47.9	0.08	0.14	1633.6	127.2	77.6	0.080	1580	67.5	0.16	3275.8
03	13.24	79.5	0.13	0.14	3043.2	126.2	75.2	0.078	1626	70.3	0.15	3766.9
04	13.48	100.0	0.16	0.14	3879.9	126.3	50.4	0.049	1177	82.2	0.18	4389.1
05	13.34	104.8	0.17	0.14	4012.0	127.3	51.1	0.050	1179	73.2	0.16	3909.7
06	13.27	89.7	0.14	0.14	3265.0	127.9	51.8	0.052	1129	67.7	0.15	3549.0
07	13.58	105.9	0.17	0.14	4061.6	129.3	41.3	0.040	958	75.9	0.17	4043.1
08	13.64	100.0	0.16	0.14	3712.1	129.6	41.0	0.039	927	74.7	0.16	3866.2
09	13.38	95.0	0.15	0.14	3554.2	129.9	43.4	0.042	976	75.3	0.17	3877.6
10	13.06	114.5	0.19	0.14	4432.2	130.7	40.9	0.041	965	72.4	0.16	3915.3
11	12.65	85.1	0.14	0.14	3244.7	129.5	49.0	0.051	1073	56.5	0.13	3073.9
12	12.53	90.5	0.15	0.14	3469.5	129.0	53.2	0.057	1145	69.0	0.16	3662.5
13	12.74	95.1	0.16	0.14	3689.7	129.1	57.6	0.062	1292	70.0	0.17	3842.9
14	12.94	86.3	0.14	0.14	3164.2	129.2	48.5	0.050	1037	55.8	0.13	2942.9
15	13.70	73.4	0.11	0.14	2857.8	129.8	42.9	0.041	1016	85.2	0.19	4612.5
16	13.31	92.9	0.15	0.14	3532.1	131.3	51.1	0.051	1147	66.1	0.15	3563.8
17	13.29	106.0	0.17	0.15	4015.6	133.6	37.6	0.037	864	70.2	0.16	3746.3
18	13.12	99.9	0.16	0.15	3814.5	134.5	44.3	0.044	1026	67.6	0.15	3656.9
19	13.28	95.0	0.15	0.15	3720.1	136.4	43.5	0.043	1031	70.5	0.16	3892.7
20	13.10	94.2	0.15	0.15	3810.0	138.1	43.5	0.044	1069	67.6	0.15	3822.7
21	13.36	107.2	0.17	0.15	4193.8	140.7	30.0	0.029	717	82.6	0.18	4495.6
22	13.16	111.2	0.18	0.15	4176.7	142.2	30.2	0.030	691	74.6	0.17	3905.9
23	12.83	92.5	0.15	0.15	3421.1	142.8	45.0	0.046	975	66.5	0.15	3367.0
24	12.97	87.7	0.14	0.15	3278.0	143.1	48.6	0.050	1039	69.1	0.16	3554.6
25	12.81	89.6	0.15	0.15	3334.0	143.8	46.6	0.049	1010	48.4	0.11	2616.3
26	12.70	97.5	0.16	0.15	3722.3	144.7	46.0	0.049	1014	55.7	0.13	3023.7
27	13.19	98.2	0.16	0.15	3820.6	146.0	33.5	0.033	786	70.2	0.16	3819.0
28	13.30	98.7	0.16	0.15	3817.9	147.0	28.4	0.028	665	70.2	0.15	3715.1
29	13.30	95.6	0.15	0.15	3642.1	148.0	28.4	0.028	657	83.5	0.19	4418.2
30	13.29	101.0	0.16	0.15	3834.0	148.5	35.0	0.034	810	77.4	0.17	4110.7
AVG	13.15	93.7	0.15		3566.2		45.6	0.046	1027	70.3	0.16	3741.0
TONS YTD					196.9				78			208

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 26 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR APRIL 1998
REPORTING DATE, TIME: 01/15/1999, 10:00

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.09	88.0	0.16	0.14	3355.7	118.6	47.6	0.052	1110	69.8	0.17	3669.4
02	11.68	72.7	0.13	0.14	2736.2	118.0	45.8	0.052	1028	60.8	0.15	3193.2
03	12.42	76.3	0.13	0.13	2917.4	117.6	55.7	0.062	1221	68.3	0.16	3690.4
04	12.56	110.0	0.19	0.14	4396.1	118.6	29.3	0.031	711	76.4	0.18	4249.1
05	12.36	89.1	0.15	0.14	3485.2	119.5	23.9	0.025	558	75.2	0.18	4116.0
06	12.34	88.6	0.15	0.14	3325.8	120.2	35.1	0.038	794	63.7	0.15	3405.0
07	12.57	96.6	0.17	0.14	3879.1	121.3	29.3	0.031	717	70.0	0.16	3895.3
08	12.78	95.6	0.16	0.14	3755.1	121.7	27.2	0.028	649	76.7	0.18	4207.0
09	12.91	91.1	0.15	0.14	3477.3	122.7	23.3	0.024	545	82.3	0.19	4345.3
10	12.39	93.7	0.16	0.14	3715.5	122.4	31.6	0.034	766	69.5	0.16	3904.4
11	12.07	85.3	0.15	0.14	3264.7	122.1	43.1	0.048	955	61.6	0.15	3307.3
12	12.17	95.5	0.17	0.14	3714.2	122.2	42.3	0.047	921	71.4	0.17	3838.3
13	12.03	75.3	0.13	0.14	2934.0	121.2	42.9	0.048	941	53.3	0.13	3048.3
14	12.29	93.7	0.16	0.14	3538.3	121.9	41.0	0.045	881	59.9	0.14	3153.1
15	12.55	64.1	0.11	0.14	2632.1	122.3	24.5	0.025	603	82.6	0.20	4681.2
16	12.31	97.6	0.17	0.14	3876.7	125.0	33.6	0.037	788	71.6	0.17	4001.2
17	12.35	91.3	0.16	0.14	3623.7	127.4	29.4	0.031	708	71.7	0.17	3950.6
18	12.24	79.0	0.14	0.14	3168.6	128.3	35.8	0.039	864	62.4	0.15	3499.1
19	12.34	92.2	0.16	0.15	3772.3	130.9	33.4	0.036	822	69.7	0.17	4001.3
20	12.55	90.9	0.16	0.15	3800.4	132.2	28.3	0.030	707	73.8	0.17	4282.1
21	12.63	94.9	0.16	0.15	3839.9	134.2	25.3	0.026	626	77.5	0.18	4388.8
22	12.57	92.6	0.16	0.15	3540.5	135.8	21.9	0.023	506	76.5	0.18	4077.1
23	12.33	89.5	0.16	0.15	3462.7	137.0	26.6	0.028	592	68.3	0.17	3610.2
24	12.22	91.6	0.16	0.15	3580.5	138.1	35.7	0.039	791	69.3	0.17	3763.6
25	11.92	87.1	0.16	0.15	3404.6	138.5	32.6	0.037	769	53.7	0.13	3038.0
26	12.06	72.3	0.13	0.15	2864.4	138.8	32.4	0.036	736	65.0	0.16	3581.3
27	12.26	90.2	0.16	0.15	3646.6	141.0	25.3	0.027	630	73.8	0.18	4170.6
28	12.46	93.6	0.16	0.15	3807.6	142.4	19.7	0.021	487	67.7	0.16	3864.5
29	12.27	84.8	0.15	0.15	3441.9	143.2	15.8	0.017	385	73.6	0.18	4138.9
30	12.33	90.2	0.16	0.15	3639.1	145.1	23.1	0.024	569	79.9	0.19	4463.7
AVG	12.34	88.4	0.15		3486.5		32.0	0.035	746	69.9	0.17	3851.1
TONS YTD					187.4				55			209

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 26 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR APRIL 1998
REPORTING DATE, TIME: 01/15/1999, 10:00

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.76	87.4	0.15	0.14	3115.2	126.3	66.5	0.068	1422	80.0	0.19	3944.0
02	13.32	90.6	0.15	0.14	3413.4	127.0	54.7	0.054	1227	79.4	0.18	4209.7
03	13.28	87.8	0.14	0.14	3438.1	127.8	47.4	0.047	1066	81.8	0.18	4450.2
04	13.12	110.1	0.18	0.14	4368.6	129.1	32.4	0.032	778	79.0	0.18	4344.4
05	12.71	98.3	0.17	0.14	3860.7	130.5	29.1	0.030	682	69.6	0.16	3826.9
06	12.69	93.4	0.16	0.14	3585.6	131.1	40.2	0.043	912	66.4	0.15	3624.7
07	13.28	95.9	0.15	0.15	3860.7	132.3	26.1	0.026	640	80.1	0.18	4502.3
08	13.52	94.8	0.15	0.15	3711.8	132.7	26.8	0.026	639	81.4	0.18	4429.5
09	13.74	98.7	0.15	0.15	3680.6	133.0	28.0	0.026	639	89.3	0.19	4656.5
10	13.32	101.5	0.16	0.15	3977.2	132.8	29.2	0.029	687	75.3	0.17	4136.6
11	13.07	94.7	0.15	0.14	3589.3	132.3	52.3	0.054	1116	60.2	0.13	3285.5
12	13.01	95.9	0.16	0.15	3724.4	132.4	52.9	0.055	1114	66.3	0.15	3599.8
13	12.79	90.8	0.15	0.14	3607.7	132.1	50.9	0.054	1103	58.6	0.13	3328.2
14	12.15	99.3	0.17	0.15	3820.5	133.1	50.4	0.057	1088	51.4	0.12	2875.4
15	10.99	103.7	0.18	0.15D	3495.0	133.1D	219.3	1.051	3285	70.3	0.16	3313.3
16	13.13	113.0	0.18	0.15	4433.8	135.4	40.5	0.042	923	71.4	0.16	3929.1
17	13.31	106.5	0.17	0.15	4196.8	138.1	37.1	0.036	887	80.4	0.18	4392.9
18	13.23	96.8	0.16	0.15	3828.3	140.3	40.0	0.040	956	72.2	0.16	3951.4
19	13.36	96.5	0.15	0.15	3796.7	142.0	38.2	0.038	905	73.1	0.16	4076.5
20	13.29	102.8	0.17	0.15	4191.3	143.9	35.7	0.035	880	72.8	0.16	4136.2
21	13.28	92.1	0.15	0.15	3651.5	145.0	28.3	0.028	683	80.8	0.18	4444.8
22	13.15	103.8	0.17	0.15	3961.2	147.2	32.8	0.033	763	81.2	0.18	4315.5
23	13.00	91.2	0.15	0.15	3406.8	148.0	44.8	0.046	959	66.4	0.15	3459.3
24	12.95	103.1	0.17	0.15	3905.7	149.2	40.9	0.042	882	73.0	0.16	3885.6
25	12.71	111.6	0.19	0.16#	4328.7	150.7	39.3	0.042	891	55.3	0.12	3083.6
26	13.11	87.6	0.14	0.15	3342.6	150.6	49.3	0.052	1089	59.1	0.13	3241.0
27	13.44	96.3	0.15	0.16#	3790.0	151.6	27.5	0.027	663	76.8	0.17	4236.3
28	13.26	99.3	0.16	0.16#	3918.4	153.5	27.0	0.027	647	73.0	0.16	3985.5
29	13.41	91.0	0.15	0.16#	3594.8	155.2	24.3	0.024	592	82.8	0.18	4576.7
30	13.62	92.0	0.15	0.16#	3595.7	156.6	26.8	0.026	631	85.3	0.19	4597.9
AVG	13.07	97.6	0.16		3773.0		44.6	0.073	958	73.1	0.16	3961.3
TONS YTD					198.5				63			209
12-MONTH ROLLING AVG												0.15SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 26 - Valid Months = 0

FOOTNOTES

* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR MAY 1998
REPORTING DATE, TIME: 01/15/1999, 10:01

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	11.53	77.6	0.15	0.15D	494.7	148.5D	69.8	0.080	256	16.9	0.05	147.1
02	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
03	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
04	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
05	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
06	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
07	--	--	--	0.15D	0.0	148.5D	--	--	0	--	--	0.0
08	0.03	0.1	--	0.16D#	0.0	153.6D	0.0	--	0	0.0	--	0.0
09	5.60	81.3	0.21	0.16D#	1685.6	153.6D	112.2	0.401	1216	15.8	0.07	436.9
10	11.42	39.9	0.08	0.15	1060.5	149.5	132.9	0.153	2115	46.0	0.12	1623.5
11	12.10	36.2	0.06	0.15	964.6	144.9	91.5	0.099	1489	71.7	0.18	2702.8
12	11.99	29.7	0.05	0.15	783.0	141.1	83.9	0.091	1361	64.0	0.16	2347.5
13	11.81	32.3	0.06	0.14	833.7	136.1	89.9	0.099	1410	67.4	0.17	2425.6
14	12.04	30.0	0.05	0.14	756.7	131.5	95.6	0.104	1474	56.4	0.14	1999.4
15	12.22	61.9	0.11	0.14	1623.9	128.3	89.5	0.096	1441	69.1	0.17	2566.0
16	11.15	72.7	0.14	0.14	2450.5	125.2	137.8	0.254	1849	50.2	0.13	2341.6
17	12.86	97.0	0.16	0.14	3839.8	126.2	51.0	0.052	1101	69.5	0.16	3827.8
18	12.87	96.7	0.16	0.14	3825.2	126.9	45.4	0.046	1070	77.5	0.18	4259.5
19	12.63	94.3	0.16	0.14	3745.0	127.0	49.0	0.051	1158	75.0	0.17	4162.2
20	12.76	90.1	0.15	0.14	3595.7	127.5	40.7	0.042	990	76.7	0.18	4254.1
21	12.95	98.0	0.16	0.14	3955.0	129.2	41.0	0.041	1013	78.1	0.18	4414.2
22	13.04	101.1	0.17	0.14	3971.2	130.1	34.1	0.034	816	83.4	0.19	4531.4
23	13.04	91.9	0.15	0.14	3557.5	129.3	45.2	0.045	1049	73.7	0.17	4015.2
24	13.16	88.3	0.14	0.14	3381.5	128.7	43.0	0.043	1013	80.0	0.18	4266.9
25	13.13	88.5	0.14	0.14	3442.0	128.2	51.3	0.051	1204	78.4	0.18	4252.5
26	13.09	93.5	0.15	0.14	3754.2	128.4	40.5	0.040	981	81.1	0.18	4498.9
27	13.02	93.8	0.15	0.14	3647.9	127.8	44.3	0.044	1055	81.2	0.19	4405.6
28	12.84	96.2	0.16	0.14	3717.3	127.1	45.0	0.046	1047	75.4	0.18	4043.2
29	12.86	93.8	0.16	0.14	3579.5	127.4	47.6	0.049	1087	76.5	0.18	4049.9
30	12.85	89.7	0.15	0.14	3450.9	127.9	46.4	0.047	1081	78.0	0.18	4163.0
31	12.97	109.0	0.18	0.14	4342.4	129.5	40.4	0.041	979	79.3	0.18	4432.3
AVG	11.76	75.3	0.14		2143.8		62.7	0.085	911	64.9	0.16	2586.0
TONS YTD					230.4				92			248

12-MONTH ROLLING AVG 0.15SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 19 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR MAY 1998
REPORTING DATE, TIME: 01/15/1999, 10:01

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	10.29	66.4	0.14	0.15D	510.9	145.1D	59.2	0.077	265	40.9	0.12	421.8
02	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
03	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
04	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
05	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
06	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
07	--	--	--	0.15D	0.0	145.1D	--	--	0	--	--	0.0
08	--	--	--	0.15D	0.0	147.5D	--	--	0	1.7	--	0.0
09	--	--	--	0.15D	0.0	147.5D	--	--	0	--	--	0.0
10	--	--	--	0.15D	0.0	147.5D	--	--	0	--	--	0.0
11	--	--	--	0.15D	0.0	147.5D	--	--	0	--	--	0.0
12	--	--	--	0.15D	0.0	147.5D	--	--	0	--	--	0.0
13	--	--	--	0.15D	0.0	147.5D	--	--	0	--	--	0.0
14	1.08	0.0	0.00	0.15D	0.0	147.5D	38.6	0.368	64	0.0	0.00	0.0
15	1.93	3.7	0.03	0.15D	95.5	147.5D	285.5	1.303	4683	4.9	0.05	181.6
16	11.27	99.0	0.18	0.15	3583.3	146.5	169.4	0.481	3317	40.1	0.09	2231.1
17	12.89	87.0	0.14	0.15	3398.4	146.5	35.5	0.037	767	72.7	0.17	3879.4
18	12.77	96.9	0.16	0.15	3751.6	147.3	35.8	0.037	836	75.8	0.18	4095.0
19	12.05	80.0	0.14	0.15D	1295.7	147.3D	54.2	0.059	499	71.5	0.18	1588.2
20	--	--	--	0.15D	0.0	147.3D	--	--	0	--	--	0.0
21	--	--	--	0.15D	0.0	147.3D	--	--	0	--	--	0.0
22	9.28	61.7	0.11	0.15D	1850.4	147.3D	176.3	0.540	2397	24.1	0.07	1106.0
23	12.76	85.7	0.14	0.15	3398.3	146.5	31.9	0.033	753	77.9	0.18	4259.3
24	12.83	93.2	0.16	0.15	3675.0	146.4	32.8	0.033	784	77.8	0.18	4262.6
25	12.85	96.7	0.16	0.15	3816.3	146.6	32.7	0.033	781	76.4	0.18	4201.4
26	12.84	95.9	0.16	0.15	3730.8	146.8	33.0	0.034	786	71.5	0.17	3888.1
27	13.05	96.6	0.16	0.15	3800.3	147.7	35.8	0.036	854	75.4	0.17	4086.2
28	12.99	95.8	0.16	0.15	3697.9	147.9	38.9	0.039	910	82.1	0.19	4394.9
29	12.88	94.0	0.16	0.15	3586.1	149.0	40.4	0.041	927	76.4	0.18	4080.2
30	12.99	101.3	0.17	0.15	3895.3	149.8	37.4	0.038	870	77.6	0.18	4122.6
31	13.02	99.4	0.16	0.16#	3966.1	152.0	30.3	0.030	731	78.6	0.18	4355.8
AVG	11.05	79.6	0.14		1550.1		68.7	0.189	652	57.0	0.15	1650.1
TONS YTD					211.6				64			235

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 13 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR MAY 1998
REPORTING DATE, TIME: 01/15/1999, 10:01

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	10.71	46.2	0.10	0.16#	1279.1	153.9	119.7	0.334	2358	26.7	0.07	1056.0
02	11.32	37.1	0.07	0.15	965.2	151.0	78.8	0.093	1245	54.5	0.15	2017.9
03	11.71	33.5	0.06	0.15	897.8	147.6	51.2	0.057	838	55.4	0.14	2088.4
04	11.68	32.3	0.06	0.15	750.0	144.6	66.8	0.075	928	62.0	0.16	1981.2
05	11.59	35.4	0.07	0.14	970.2	140.0	73.4	0.083	1206	59.6	0.15	2222.4
06	10.68	41.6	0.09	0.14	1046.9	136.1	138.6	0.183	2077	48.9	0.13	1745.5
07	10.83	40.6	0.08	0.14	982.1	132.5	114.4	0.145	1600	58.7	0.16	1955.6
08	0.01	0.0	--	0.14D	0.0	129.5D	0.5	--	0	0.0	--	0.0
09	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
10	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
11	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
12	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
13	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
14	--	--	--	0.14D	0.0	129.5D	--	--	0	--	--	0.0
15	2.24	19.6	0.15	0.14D	232.6	129.5D	500.9	2.173	3316	4.5	0.05	78.4
16	11.34	129.0	0.25	0.14	4465.0	130.3	176.3	0.461	3388	32.9	0.08	1828.4
17	12.31	87.0	0.15	0.14	3305.4	129.9	56.4	0.061	1237	60.5	0.14	3311.2
18	12.75	97.0	0.16	0.14	3801.5	130.2	51.5	0.053	1208	76.0	0.18	4168.6
19	12.90	108.0	0.18	0.14	4399.8	131.4	48.8	0.050	1180	84.5	0.19	4737.2
20	12.49	102.4	0.18	0.14	4208.3	131.9	40.7	0.043	1014	79.4	0.19	4501.3
21	12.94	101.7	0.17	0.14	4224.4	131.5	42.9	0.043	1090	78.6	0.18	4562.0
22	13.02	98.6	0.16	0.14	3982.8	131.3	34.8	0.035	855	81.3	0.19	4532.4
23	13.06	99.0	0.16	0.14	3799.4	131.2	45.8	0.046	1063	74.3	0.17	4031.2
24	13.03	97.3	0.16	0.14	3820.1	131.3	46.6	0.047	1111	77.5	0.18	4259.9
25	13.01	95.6	0.16	0.14	3851.8	131.0	42.7	0.043	1029	77.8	0.18	4333.7
26	13.15	97.9	0.16	0.14	3965.3	131.6	42.3	0.042	1036	78.1	0.18	4380.1
27	13.03	89.9	0.15	0.14	3488.5	130.9	45.9	0.046	1089	80.0	0.18	4334.6
28	13.06	96.2	0.16	0.14	3704.9	131.4	48.9	0.049	1131	78.7	0.18	4194.3
29	13.18	94.6	0.15	0.14	3590.5	131.0	49.9	0.050	1124	79.3	0.18	4130.1
30	13.00	98.0	0.16	0.14	3741.7	130.4	48.9	0.049	1136	76.6	0.18	4058.4
31	13.18	101.6	0.17	0.14	4048.4	131.5	42.9	0.043	1034	79.7	0.18	4421.5
AVG	11.45	75.2	0.14		2242.6		80.4	0.179	1074	62.6	0.16	2546.1
TONS YTD					233.5				80			249

12-MONTH ROLLING AVG 0.14SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 13 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR JUNE 1998
REPORTING DATE, TIME: 01/15/1999, 10:04

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.88	89.7	0.15	0.14	3564.6	129.5	43.9	0.045	1045	78.1	0.18	4276.6
02	13.04	97.4	0.16	0.14	3903.6	129.6	40.6	0.041	992	82.1	0.19	4591.4
03	12.88	91.2	0.15	0.14	3498.6	129.4	41.8	0.042	974	71.9	0.17	3818.5
04	13.00	96.4	0.16	0.14	3734.6	129.7	44.2	0.044	1043	68.9	0.16	3754.9
05	13.03	94.8	0.16	0.14	3873.4	129.5	44.0	0.044	1087	80.3	0.18	4539.5
06	12.82	88.7	0.15	0.14	3296.4	129.8	50.4	0.052	1075	67.3	0.16	3575.5
07	12.80	95.8	0.16	0.14	3786.9	130.7	44.9	0.046	1075	75.8	0.18	4182.8
08	12.91	98.3	0.16	0.14	3066.3	131.6	38.9	0.039	740	80.3	0.19	3502.5
09	13.07	94.6	0.16	0.14	3858.8	135.4	38.4	0.038	949	84.1	0.19	4784.8
10	13.12	91.6	0.15	0.14	3521.4	139.0	45.6	0.045	1053	86.3	0.20	4618.1
11	13.23	103.3	0.17	0.15	4103.2	143.6	38.0	0.037	917	84.9	0.19	4677.6
12	13.04	94.6	0.16	0.15	3886.4	147.7	36.0	0.036	905	84.9	0.19	4851.4
13	13.07	97.7	0.16	0.15	3844.7	152.1	37.4	0.037	892	84.4	0.19	4622.8
14	13.21	98.3	0.16	0.16#	4064.1	155.2	36.6	0.036	921	86.1	0.19	4953.2
15	13.31	99.7	0.16	0.16#	3949.2	157.2	38.6	0.038	927	80.5	0.18	4427.2
16	13.07	90.8	0.15	0.16#	2934.3	156.9	39.2	0.039	774	77.8	0.18	3486.3
17	13.09	90.4	0.15	0.16D#	2900.3	156.9D	38.3	0.038	747	84.6	0.19	3778.7
18	13.11	87.5	0.14	0.16#	3582.0	156.4	38.2	0.038	946	83.9	0.19	4753.7
19	13.28	90.9	0.15	0.16#	3507.2	156.1	35.9	0.035	842	82.7	0.19	4442.5
20	12.98	84.9	0.14	0.16#	3402.4	156.0	42.0	0.042	1021	70.1	0.16	3909.5
21	12.97	80.6	0.13	0.15	3139.0	154.9	44.7	0.045	1016	54.8	0.13	2972.0
22	13.03	88.7	0.15	0.15	3623.9	154.3	42.5	0.043	1060	75.9	0.17	4344.3
23	13.24	88.0	0.14	0.15	3551.3	154.3	35.9	0.035	887	80.8	0.18	4568.0
24	13.11	97.0	0.16	0.15	3917.5	155.1	42.8	0.043	1053	80.3	0.18	4522.7
25	13.15	85.0	0.14	0.15	3361.1	155.2	48.4	0.048	1162	78.7	0.18	4318.2
26	12.99	89.7	0.15	0.15	3537.0	155.0	51.3	0.052	1233	75.2	0.17	4144.0
27	13.22	81.6	0.13	0.15	3126.5	154.4	45.1	0.045	1035	73.3	0.16	3928.7
28	13.27	88.7	0.14	0.15	3589.0	154.0	50.4	0.050	1221	73.1	0.17	4152.3
29	13.34	97.0	0.16	0.15	3918.7	154.3	51.9	0.051	1265	80.8	0.18	4537.9
30	13.17	93.6	0.15	0.15	3754.0	154.4	51.2	0.051	1227	75.5	0.17	4189.7
AVG	13.08	92.2	0.15		3593.2		42.6	0.043	1003	78.1	0.18	4240.8
TONS YTD					284.5				107			312

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 25 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR JUNE 1998
REPORTING DATE, TIME: 01/15/1999, 10:04

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.97	94.6	0.16	0.16#	3743.2	152.1	36.6	0.037	871	77.2	0.18	4195.1
02	13.40	106.4	0.17	0.16#	4235.4	153.2	26.2	0.026	637	87.3	0.19	4839.3
03	13.26	102.4	0.17	0.16#	4038.8	154.6	32.5	0.032	782	80.0	0.18	4402.1
04	13.14	94.1	0.15	0.16#	3645.6	154.5	33.8	0.034	794	72.8	0.17	3941.5
05	13.25	91.2	0.15	0.16#	3130.8	154.4	34.8	0.034	730	79.8	0.18	3836.3
06	12.69	91.3	0.15	0.16#	3398.9	153.9	44.0	0.046	942	76.4	0.18	3933.0
07	12.85	94.0	0.16	0.16#	3706.0	154.0	39.0	0.040	928	77.4	0.18	4231.4
08	12.95	96.1	0.16	0.16#	3724.0	154.4	34.5	0.035	822	79.3	0.18	4312.7
09	12.87	86.7	0.14	0.16#	3520.0	154.2	36.2	0.037	891	79.5	0.18	4477.3
10	12.68	85.5	0.15	0.16#	3382.7	154.2	35.5	0.037	847	78.9	0.19	4310.1
11	12.96	93.4	0.15	0.16#	3747.9	155.6	31.6	0.032	770	80.9	0.19	4503.6
12	13.19	87.1	0.14	0.16#	3527.5	155.2	37.5	0.037	925	83.0	0.19	4704.1
13	12.95	89.7	0.15	0.16#	3583.2	154.8	33.0	0.033	802	80.3	0.19	4489.7
14	13.18	93.1	0.15	0.16#	3862.0	155.2	30.7	0.030	771	83.4	0.19	4806.4
15	13.13	89.9	0.15	0.16#	3253.7	154.9	29.6	0.030	659	79.7	0.18	4025.4
16	13.18	92.1	0.15	0.16#	3574.4	154.8	32.7	0.032	771	79.7	0.18	4289.8
17	13.28	93.7	0.15	0.16#	3825.2	154.8	36.4	0.036	901	81.6	0.18	4604.1
18	13.19	93.7	0.15	0.16#	3336.0	154.9	32.6	0.032	709	80.3	0.18	3974.2
19	12.93	89.6	0.15	0.16D#	3068.0	154.9D	28.7	0.029	594	84.7	0.20	3993.8
20	12.61	89.5	0.15	0.15	3614.5	154.9	38.9	0.040	966	67.3	0.16	3796.2
21	12.76	85.5	0.14	0.15	3415.3	154.9	39.6	0.041	922	72.8	0.17	4032.1
22	13.01	92.7	0.15	0.15	3844.1	154.9	34.6	0.035	870	79.8	0.18	4602.3
23	13.13	91.2	0.15	0.15	3748.4	155.4	34.4	0.034	863	82.7	0.19	4724.8
24	13.09	93.2	0.15	0.15	3830.9	155.7	36.2	0.036	902	81.2	0.19	4652.5
25	12.84	90.3	0.15	0.15	3671.0	155.7	35.7	0.036	879	77.1	0.18	4350.1
26	12.66	92.5	0.16	0.15	3743.3	155.7	38.9	0.040	960	80.5	0.19	4559.4
27	12.71	68.3	0.11	0.15	2722.2	154.2	34.6	0.036	830	65.7	0.15	3645.8
28	12.63	94.3	0.16	0.15	3879.6	154.3	36.8	0.038	926	68.4	0.16	3917.8
29	12.60	94.7	0.16	0.15	3998.9	154.7	39.8	0.042	1024	77.4	0.18	4558.5
30	12.81	92.0	0.15	0.15	3722.8	154.1	38.9	0.040	955	73.3	0.17	4143.0
AVG	12.96	91.6	0.15		3616.5		35.1	0.036	841	78.3	0.18	4295.1
TONS YTD					266.0				76			299

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 25 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR JUNE 1998
REPORTING DATE, TIME: 01/15/1999, 10:04

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.09	101.3	0.17	0.14	3974.0	131.9	47.0	0.047	1101	81.1	0.18	4379.9
02	13.23	101.8	0.17	0.14	4048.4	132.3	40.4	0.040	977	83.0	0.19	4572.3
03	13.24	107.0	0.17	0.14	4222.7	133.3	43.7	0.043	1049	78.3	0.18	4311.7
04	13.16	102.6	0.17	0.14	3059.5	133.5	43.8	0.044	797	67.1	0.15	2809.9
05	13.29	102.5	0.17	0.15	4128.3	137.9	47.1	0.046	1147	80.5	0.18	4467.0
06	12.92	96.8	0.16	0.15	3634.4	142.1	67.4	0.069	1453	69.1	0.16	3635.5
07	13.28	101.4	0.16	0.15	3933.8	146.7	58.8	0.058	1374	78.1	0.18	4226.3
08	13.03	100.8	0.17	0.16#	4007.0	151.2	46.9	0.047	1123	78.3	0.18	4276.2
09	12.92	92.5	0.15	0.16#	3781.3	155.5	44.7	0.045	1111	79.1	0.18	4495.3
10	12.97	98.1	0.16	0.16#	3774.7	159.9	48.0	0.048	1115	80.6	0.19	4311.9
11	12.99	105.2	0.17	0.17#	4224.9	164.9#	41.3	0.041	1005	82.1	0.19	4583.2
12	13.00	87.5	0.14	0.17#	3580.1	164.2#	48.0	0.048	1198	83.5	0.19	4785.6
13	12.82	78.6	0.13	0.16#	3179.9	163.1#	41.8	0.043	1029	78.8	0.18	4434.3
14	12.89	86.2	0.14	0.16#	3632.5	162.5	41.5	0.042	1063	80.9	0.19	4717.8
15	13.01	89.3	0.15	0.16#	3572.5	161.2	41.8	0.042	1022	82.8	0.19	4605.6
16	12.92	84.2	0.14	0.16#	3286.4	161.2	50.2	0.052	1178	79.4	0.18	4299.2
17	12.93	88.8	0.15	0.16#	3698.4	160.9	41.7	0.042	1050	82.5	0.19	4745.5
18	12.89	89.8	0.15	0.16#	3709.9	159.8	44.0	0.045	1108	80.0	0.19	4613.4
19	13.03	85.5	0.14	0.16#	3359.5	158.8	41.9	0.042	997	80.3	0.18	4377.2
20	12.92	93.8	0.15	0.16#	3771.5	158.3	45.1	0.046	1105	69.8	0.16	3951.4
21	12.95	86.5	0.14	0.16#	3405.0	157.4	49.3	0.050	1133	73.8	0.17	4046.5
22	13.10	96.4	0.16	0.16#	3112.6	157.5	40.2	0.040	794	75.6	0.17	3395.8
23	13.21	96.5	0.16	0.16#	3257.0	157.6	39.9	0.039	823	80.9	0.18	3814.2
24	13.17	88.3	0.14	0.16#	3594.1	157.4	43.4	0.043	1073	81.9	0.19	4638.0
25	13.22	92.2	0.15	0.15	3647.1	157.1	48.0	0.047	1150	76.1	0.17	4192.5
26	13.04	89.9	0.15	0.15	3548.6	157.2	52.6	0.053	1261	81.8	0.19	4501.8
27	13.02	83.1	0.14	0.15	3203.7	156.6	44.3	0.045	1021	64.6	0.15	3503.4
28	12.99	96.5	0.16	0.15	3884.5	156.8	46.7	0.047	1134	74.4	0.17	4165.8
29	12.88	94.6	0.16	0.15	3900.8	156.7	46.7	0.048	1171	74.9	0.17	4302.0
30	12.84	90.0	0.15	0.15	3607.0	155.9	49.6	0.051	1202	74.0	0.17	4103.0
AVG	13.03	93.6	0.15		3658.0		46.2	0.046	1092	77.8	0.18	4242.1
TONS YTD					288.5				96			312
12-MONTH ROLLING AVG												0.15SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 25 - Valid Months = 0

FOOTNOTES

* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR JULY 1998
REPORTING DATE, TIME: 01/15/1999, 10:05

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.50	98.5	0.16	0.15	3931.8	153.6	45.0	0.043	1088	85.0	0.19	4716.8
02	13.44	93.0	0.15	0.15	3601.5	153.6	43.3	0.042	1014	85.8	0.19	4616.6
03	13.32	95.3	0.15	0.15	3753.9	153.3	35.0	0.034	836	84.9	0.19	4648.0
04	13.28	103.2	0.17	0.15	4159.2	153.9	40.3	0.040	991	84.8	0.19	4774.3
05	13.40	96.7	0.16	0.15	3662.5	153.8	43.8	0.043	991	85.5	0.19	4463.2
06	13.45	95.5	0.15	0.15D	3231.6	153.8D	45.5	0.044	940	85.6	0.19	4050.1
07	13.21	96.3	0.16	0.15	3715.0	153.8	46.5	0.046	1092	72.2	0.16	3878.2
08	13.39	93.8	0.15	0.15	3634.3	154.4	43.2	0.042	1024	81.9	0.18	4464.9
09	13.45	109.7	0.17	0.15	4286.1	155.3	44.9	0.044	1069	82.2	0.18	4468.4
10	13.30	92.1	0.15	0.15	3573.9	155.0	41.7	0.041	987	78.4	0.18	4283.0
11	12.89	97.5	0.16	0.15	-66286030.0	155.4	41.7	0.042	-66288700	73.9	0.17	-66285810.0
12	13.22	100.6	0.16	0.15	-66056620.0	156.0	42.9	0.043	-66059330	88.6	0.18	-66056280.0
13	13.23	94.8	0.15	0.15	3729.3	155.6	50.7	0.050	1184	75.5	0.17	4176.5
14	13.07	98.0	0.16	0.15	3904.3	156.0	44.8	0.045	1085	81.1	0.19	4508.4
15	13.29	100.3	0.16	0.15	3946.2	156.2	44.3	0.043	1061	81.0	0.18	4418.0
16	13.03	94.3	0.16	0.15	3752.3	156.2	26.5	0.027	629	73.7	0.17	4091.4
17	12.99	104.4	0.17	0.15	4181.4	156.7	41.4	0.041	1005	68.2	0.16	3790.9
18	13.17	100.1	0.16	0.15	4035.7	157.4	42.8	0.043	1050	77.3	0.18	4313.4
19	13.07	90.9	0.15	0.15	3577.4	157.6	38.2	0.038	912	79.1	0.18	4346.5
20	13.28	98.4	0.16	0.15	3991.2	158.1	45.7	0.045	1132	82.5	0.19	4673.7
21	13.10	92.4	0.15	0.15	3518.2	158.4	41.5	0.041	954	68.2	0.16	3611.2
22	13.13	93.6	0.15	0.15	3630.1	159.1	52.6	0.052	1233	76.3	0.17	4100.1
23	13.19	99.9	0.16	0.15	4020.7	159.6	51.4	0.051	1258	79.0	0.18	4389.8
24	13.16	100.0	0.16	0.16#	4080.3	160.1	51.1	0.051	1276	81.3	0.19	4667.4
25	13.30	106.2	0.17	0.16#	4242.5	160.3	45.5	0.045	1106	85.2	0.19	4769.7
26	13.19	100.1	0.16	0.16#	3956.1	160.9	43.7	0.043	1048	77.8	0.18	4280.8
27	13.12	94.0	0.15	0.16#	3689.1	161.0	42.6	0.042	1023	80.1	0.18	4424.9
28	12.97	97.0	0.16	0.16#	3849.5	161.9	46.7	0.047	1130	77.5	0.18	4290.8
29	13.08	93.2	0.15	0.16#	3905.2	162.3	45.2	0.045	1146	78.6	0.18	4572.5
30	13.22	85.1	0.14	0.16#	3490.5	161.5	44.6	0.044	1105	83.8	0.19	4782.4
31	13.47	95.1	0.15	0.16#	3811.7	161.4	42.6	0.041	1039	87.9	0.20	4923.5
AVG	13.22	97.1	0.16		-4265542.0		43.7	0.043	-4268311	80.1	0.18	-4264988.0
TONS YTD					343.9				123			380

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1

N = Data Did Not Meet The Minimum Requirements	CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR JULY 1998
REPORTING DATE, TIME: 01/15/1999, 10:05

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.09	102.7	0.17	0.15	4188.5	154.2	34.0	0.034	841	79.2	0.18	4489.7
02	13.06	99.3	0.16	0.15	3955.4	154.4	32.3	0.032	778	81.3	0.19	4489.0
03	12.99	95.4	0.16	0.15	3823.6	153.7	26.0	0.026	631	82.0	0.19	4561.1
04	13.07	100.4	0.17	0.15	4128.3	153.7	31.8	0.032	787	83.1	0.19	4706.1
05	12.86	99.2	0.17	0.15	3864.4	154.0	34.4	0.035	800	79.8	0.19	4289.4
06	13.04	83.0	0.14	0.15	3210.6	153.7	30.8	0.031	724	77.4	0.18	4166.4
07	12.79	98.5	0.17	0.15	3897.4	154.6	36.2	0.037	871	72.6	0.17	3969.9
08	12.85	102.0	0.17	0.15	4031.1	155.2	36.4	0.037	869	76.1	0.18	4150.5
09	12.92	103.1	0.17	0.15	4062.0	155.7	33.9	0.034	813	78.3	0.18	4299.6
10	13.09	101.3	0.17	0.15	4019.3	156.7	31.9	0.032	766	78.9	0.18	4322.9
11	12.28	88.2	0.15	0.15	3743.7	157.2	31.9	0.034	825	75.4	0.18	4419.8
12	12.71	97.0	0.16	0.15	-32895260.0	157.7	32.8	0.034	-32898290	71.4	0.17	-32895090.0
13	12.82	97.4	0.16	0.16#	3903.2	158.5	35.1	0.036	848	77.1	0.18	4330.2
14	12.89	91.9	0.15	0.16#	3710.9	158.8	28.8	0.029	708	81.2	0.19	4573.3
15	12.67	86.3	0.15	0.16#	3530.6	158.7	33.6	0.035	841	76.5	0.18	4383.4
16	12.69	88.1	0.15	0.16#	3564.9	158.8	34.5	0.036	852	66.4	0.16	3779.0
17	12.85	97.2	0.16	0.16#	3947.1	159.4	34.6	0.035	859	77.7	0.18	4391.8
18	12.94	99.5	0.16	0.16#	4034.4	159.9	34.3	0.035	849	73.5	0.17	4145.7
19	12.62	94.5	0.16	0.16#	3831.7	160.2	31.4	0.032	774	72.4	0.17	4089.5
20	12.86	84.3	0.14	0.16#	3559.1	160.0	35.5	0.036	907	79.4	0.18	4641.5
21	12.78	87.4	0.15	0.16#	3426.3	160.1	32.7	0.033	779	71.5	0.17	3906.5
22	12.76	91.6	0.15	0.16#	3638.4	159.9	41.7	0.043	1009	71.4	0.17	3966.0
23	12.83	97.8	0.16	0.16#	4044.3	160.2	37.6	0.038	937	76.8	0.18	4391.9
24	12.83	96.9	0.16	0.16#	4033.9	160.2	37.4	0.038	950	77.8	0.18	4503.0
25	12.63	91.3	0.15	0.16#	3734.0	160.0	36.6	0.038	914	79.7	0.19	4560.2
26	12.51	92.9	0.16	0.16#	3766.4	159.7	35.8	0.037	883	75.2	0.18	4283.4
27	12.79	97.2	0.16	0.16#	3867.8	161.2	36.5	0.037	882	80.7	0.19	4431.6
28	12.59	89.5	0.15	0.16#	3604.4	161.0	39.5	0.041	967	74.9	0.18	4207.4
29	12.67	88.4	0.15	0.16#	3820.3	160.7	36.9	0.038	968	77.9	0.18	4658.8
30	12.76	94.9	0.16	0.16#	4026.5	161.0	29.1	0.030	752	81.2	0.19	4804.1
31	12.69	95.2	0.16	0.16#	4025.7	160.6	32.2	0.033	842	80.5	0.19	4783.9
AVG	12.80	94.6	0.16		-1057428.0		34.1	0.035	-1060422	77.0	0.18	-1056916.0
TONS YTD					325.8				90			367

12-MONTH ROLLING AVG 0.16SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR JULY 1998
REPORTING DATE, TIME: 01/15/1999, 10:05

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.22	104.3	0.17	0.15	4250.9	155.9	36.1	0.036	891	79.3	0.18	4486.6
02	13.33	107.7	0.17	0.15	4293.4	156.3	30.9	0.030	745	83.8	0.19	4643.1
03	13.30	97.7	0.16	0.15	3878.6	155.8	33.9	0.033	823	85.6	0.19	4744.6
04	13.07	100.9	0.17	0.15	4130.2	156.0	43.4	0.043	1080	82.8	0.19	4733.4
05	12.95	107.4	0.18	0.15	3452.7	156.2	44.9	0.045	876	75.8	0.18	2768.5
06	13.17	97.6	0.16	0.15	3520.5	156.6	44.8	0.045	967	72.7	0.16	3580.8
07	12.94	97.2	0.16	0.15	3889.8	156.7	37.3	0.038	902	71.7	0.17	3996.9
08	13.16	101.1	0.16	0.15	3936.1	156.7	33.4	0.033	791	81.9	0.19	4434.7
09	13.15	105.5	0.17	0.15	4178.7	157.5	40.5	0.040	970	80.3	0.18	4422.5
10	13.11	96.2	0.16	0.15	3794.7	157.6	43.2	0.043	1042	80.3	0.18	4392.3
11	13.13	98.5	0.16	0.15	-33288500.0	157.3	45.0	0.044	-33291250	81.1	0.18	-33288010.0
12	12.97	96.9	0.16	0.15	-33124710.0	158.0	44.5	0.045	-33127400	80.0	0.18	-33124220.0
13	12.96	98.8	0.16	0.16#	3953.5	159.2	52.4	0.053	1250	76.7	0.18	4279.0
14	12.96	92.7	0.15	0.16#	3697.3	159.7	46.3	0.047	1125	79.1	0.18	4437.3
15	13.10	95.4	0.16	0.16#	3767.9	160.1	47.3	0.047	1143	72.9	0.17	4024.8
16	13.00	98.2	0.16	0.16#	3936.7	161.1	45.9	0.046	1122	71.3	0.16	3991.4
17	12.83	99.2	0.17	0.16#	4042.2	161.9	46.1	0.047	1136	76.7	0.18	4300.9
18	13.07	100.3	0.16	0.16#	4057.7	162.6	35.3	0.035	873	78.8	0.18	4451.4
19	12.80	86.7	0.15	0.16#	3475.8	162.8#	37.6	0.038	913	79.4	0.18	4389.7
20	12.98	88.7	0.15	0.16#	3608.5	162.5	41.2	0.041	1024	76.9	0.18	4358.6
21	12.87	87.0	0.15	0.16#	3414.1	162.6	49.1	0.050	1163	71.9	0.17	3896.3
22	12.98	99.3	0.16	0.16#	3953.4	162.7#	53.2	0.054	1277	71.3	0.16	3942.2
23	12.94	97.4	0.16	0.16#	3943.0	162.6	47.2	0.048	1169	76.7	0.18	4343.0
24	12.87	93.0	0.15	0.16#	3869.2	162.7#	48.5	0.049	1233	76.5	0.18	4456.8
25	12.83	96.7	0.16	0.16#	3940.4	162.8#	46.7	0.048	1167	77.9	0.18	4442.2
26	12.57	94.6	0.16	0.16#	3805.8	162.9#	36.8	0.038	899	72.2	0.17	4044.2
27	12.88	98.1	0.16	0.16#	3912.4	163.8#	45.6	0.046	1108	79.5	0.19	4442.3
28	12.80	90.5	0.15	0.16#	3634.9	163.6#	45.4	0.046	1115	79.7	0.19	4457.3
29	12.95	87.1	0.14	0.16#	3667.5	163.2#	45.8	0.046	1184	81.6	0.19	4811.3
30	12.65	90.1	0.15	0.16#	3821.1	163.4#	42.2	0.044	1092	78.2	0.18	4608.2
31	12.70	93.4	0.16	0.16#	4012.0	162.9#	41.6	0.043	1085	80.9	0.19	4815.8
AVG	12.98	96.7	0.16		-2138754.0		43.0	0.043	-2141564	77.9	0.18	-2138307.0
TONS YTD					348.6				113			379
12-MONTH ROLLING AVG												0.15SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1

N = Data Did Not Meet The Minimum Requirements	CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR AUGUST 1998
REPORTING DATE, TIME: 01/15/1999, 10:06

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.30	92.5	0.15	0.16#	3738.2	161.1	32.8	0.032	811	86.8	0.19	4885.7
02	13.01	89.6	0.15	0.16#	3566.9	161.0	44.4	0.045	1061	75.5	0.17	4182.6
03	12.71	84.7	0.14	0.16#	3547.0	160.6	45.1	0.046	1090	69.6	0.16	4074.4
04	13.22	86.5	0.14	0.16#	3545.4	159.6	39.3	0.039	976	81.6	0.18	4661.8
05	12.92	65.6	0.11	0.15	2469.4	157.7	44.7	0.045	1006	64.8	0.15	3383.4
06	12.96	86.3	0.14	0.15	3348.4	157.1	45.8	0.046	1066	79.5	0.18	4232.6
07	12.89	79.0	0.13	0.15	3037.5	156.1	52.4	0.053	1156	70.7	0.16	3789.0
08	12.90	88.7	0.15	0.15	3593.3	155.1	41.0	0.042	1015	78.0	0.18	4389.8
09	12.92	92.6	0.15	0.15	3934.9	155.4	32.9	0.033	847	72.1	0.17	4234.2
10	13.38	91.2	0.15	0.15	3627.0	154.8	39.0	0.038	947	85.8	0.19	4765.9
11	13.26	92.3	0.15	0.15	3742.5	154.4	41.1	0.040	1012	81.4	0.18	4563.6
12	13.26	85.3	0.14	0.15	3428.0	153.8	36.1	0.036	881	76.6	0.17	4316.1
13	13.02	94.3	0.16	0.15	3816.5	153.6	43.3	0.043	1066	72.2	0.17	4094.8
14	13.04	94.8	0.16	0.15	3890.0	153.3	42.0	0.042	1047	74.1	0.17	4230.7
15	13.30	102.6	0.17	0.15	4231.7	153.7	43.6	0.043	1087	80.5	0.18	4589.7
16	13.21	109.0	0.18	0.15	4154.0	153.6	43.6	0.043	1014	76.0	0.17	4124.8
17	13.04	81.6	0.13	0.15	3225.2	152.4	41.5	0.041	1002	73.9	0.17	4069.9
18	13.02	86.7	0.14	0.15	3504.7	152.1	35.7	0.036	870	78.0	0.18	4382.3
19	13.14	96.4	0.16	0.15	4041.2	152.1	42.0	0.042	1078	80.2	0.18	4711.8
20	13.16	94.7	0.15	0.15	3769.9	152.3	41.5	0.041	998	80.7	0.18	4469.1
21	13.27	102.4	0.17	0.15	4073.5	152.9	39.8	0.039	954	80.5	0.18	4427.2
22	13.16	95.1	0.15	0.15	3762.5	152.6	41.6	0.041	1005	78.1	0.18	4279.8
23	13.20	93.9	0.15	0.15	3660.5	152.2	37.9	0.038	903	80.1	0.18	4386.6
24	13.24	102.0	0.17	0.15	4060.6	152.1	41.1	0.040	988	79.8	0.18	4414.3
25	13.37	104.6	0.17	0.15	4179.5	152.6	38.8	0.038	943	80.4	0.18	4442.3
26	13.26	90.6	0.15	0.15	3646.1	152.5	39.9	0.039	974	78.2	0.18	4393.7
27	11.75	84.8	0.15	0.15D	2608.2	152.5D	175.9	0.605	2660	68.0	0.15	2913.6
28	13.31	102.5	0.17	0.15	4063.6	152.6	40.1	0.039	967	76.9	0.17	4222.8
29	13.27	99.7	0.16	0.15	3979.5	152.9	43.3	0.043	1046	77.9	0.17	4296.8
30	13.12	95.6	0.16	0.15	3744.5	153.5	47.9	0.048	1116	71.5	0.16	3915.0
31	13.31	102.6	0.17	0.15	4189.0	154.2	43.6	0.043	1081	68.7	0.15	3943.4
AVG	13.09	92.5	0.15		3683.2		45.7	0.059	1054	76.7	0.17	4251.2
TONS YTD					400.7				140			445

12-MONTH ROLLING AVG 0.18SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR AUGUST 1998
REPORTING DATE, TIME: 01/15/1999, 10:06

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	11.20	74.4	0.16	0.16#	2920.7	158.9	141.0	0.390	2581	62.6	0.15	3630.2
02	12.32	84.5	0.15	0.16#	3443.8	158.4	35.9	0.038	885	74.8	0.18	4205.2
03	12.38	78.2	0.14	0.16#	3248.4	157.1	37.6	0.040	926	65.5	0.15	3880.1
04	12.49	83.2	0.14	0.16#	3569.4	156.3	32.9	0.034	856	75.1	0.18	4491.2
05	12.12	71.1	0.13	0.16#	2832.9	155.7	41.6	0.045	993	64.7	0.16	3591.4
06	12.28	91.2	0.16	0.16#	3614.8	155.2	46.8	0.050	1110	68.6	0.17	3762.1
07	12.37	67.4	0.12	0.15	2650.1	153.1	52.9	0.057	1166	71.7	0.17	3881.7
08	12.61	94.2	0.16	0.15	3880.9	152.8	30.5	0.032	769	78.6	0.19	4498.6
09	12.08	86.4	0.15	0.15DN	365.4	152.8DN	27.8	0.030	69	82.4	0.20	441.9
10	--	--	--	0.15DN	0.0	152.8DN	--	--	0	--	--	0.0
11	--	--	--	0.15DN	0.0	152.8DN	--	--	0	--	--	0.0
12	8.41	69.4	0.14	0.15DN	1504.8	152.8DN	367.5	1.468	3324	25.0	0.09	757.8
13	12.84	89.8	0.15	0.15	3611.9	152.1	31.9	0.033	784	76.1	0.18	4286.3
14	13.01	93.8	0.15	0.15	3779.7	151.9	29.7	0.030	731	76.3	0.17	4268.9
15	12.85	92.6	0.16	0.15	3748.1	151.4	34.1	0.035	837	79.4	0.18	4449.3
16	12.86	96.8	0.16	0.15	3756.6	151.1	32.7	0.033	776	76.2	0.18	4104.7
17	12.98	88.2	0.15	0.15	3504.6	150.7	31.7	0.032	765	83.5	0.19	4595.1
18	12.87	87.3	0.15	0.15	3482.3	150.5	26.0	0.026	630	78.9	0.18	4390.3
19	12.73	91.0	0.15	0.15	3842.2	150.6	30.4	0.031	778	79.6	0.19	4666.8
20	12.71	93.7	0.16	0.15	3709.7	150.1	31.8	0.033	770	77.5	0.18	4279.2
21	12.60	87.2	0.15	0.15	3455.5	149.2	29.8	0.031	721	72.9	0.17	4035.5
22	12.57	86.3	0.15	0.15	3403.6	148.4	30.8	0.032	739	66.8	0.16	3701.4
23	12.61	93.3	0.16	0.15	3666.5	148.7	29.8	0.031	713	67.5	0.16	3682.5
24	12.86	98.7	0.16	0.15	3889.0	149.2	32.0	0.032	772	78.7	0.18	4336.0
25	12.92	103.8	0.17	0.15	4086.7	149.8	25.9	0.026	621	79.7	0.18	4393.9
26	12.93	96.7	0.16	0.15	3836.1	149.6	30.3	0.031	728	77.9	0.18	4262.2
27	13.10	97.6	0.16	0.15	3792.6	149.4	31.1	0.031	740	84.7	0.19	4587.3
28	12.98	97.0	0.16	0.15	3797.5	149.7	32.6	0.033	781	80.5	0.18	4374.4
29	12.75	98.9	0.17	0.15	3946.1	150.0	31.6	0.032	759	78.0	0.18	4313.5
30	12.35	89.0	0.15	0.15	3561.8	149.5	37.6	0.040	901	67.7	0.16	3786.5
31	12.61	92.9	0.16	0.15	3809.4	149.6	34.4	0.036	861	71.7	0.17	4122.0
AVG	12.46	88.8	0.15		3184.2		48.6	0.096	874	73.2	0.17	3670.2
TONS YTD					374.9				103			424

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 29 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR AUGUST 1998
REPORTING DATE, TIME: 01/15/1999, 10:06

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.87	89.6	0.15	0.16#	3739.7	161.8	42.0	0.043	1070	78.0	0.18	4543.2
02	12.76	91.8	0.15	0.16#	3682.1	161.6	48.2	0.049	1166	72.1	0.17	4012.2
03	12.51	74.9	0.13	0.16#	3082.2	160.0	46.3	0.049	1139	59.1	0.14	3520.5
04	12.31	74.6	0.13	0.16#	3256.3	158.5	40.9	0.043	1093	67.0	0.16	4096.8
05	12.24	73.9	0.13	0.15	2981.7	157.2	45.8	0.049	1102	54.7	0.13	3052.8
06	12.49	85.3	0.15	0.15	3451.8	156.5	43.9	0.046	1064	61.6	0.15	3444.3
07	12.67	80.1	0.13	0.15	3106.7	155.1	58.4	0.061	1297	57.8	0.13	3213.9
08	12.82	92.5	0.16	0.15	3804.2	154.5	40.4	0.041	1005	68.3	0.16	3886.7
09	12.42	85.0	0.15	0.15	3597.1	154.1	36.3	0.038	940	69.9	0.17	4130.1
10	12.87	62.9	0.10	0.15	2562.7	152.0	41.5	0.042	1022	81.2	0.19	4604.8
11	12.78	76.6	0.13	0.15	3149.0	150.9	46.2	0.047	1161	81.3	0.19	4675.9
12	12.90	95.9	0.16	0.15	3918.9	150.7	36.8	0.037	915	80.5	0.19	4600.6
13	12.67	87.3	0.15	0.15	3607.5	150.5	43.0	0.044	1080	78.1	0.18	4494.3
14	12.77	88.9	0.15	0.15	3696.5	150.2	42.7	0.044	1086	81.4	0.19	4743.9
15	12.74	90.5	0.15	0.15	3809.4	149.7	46.4	0.048	1189	75.2	0.18	4396.9
16	12.85	91.4	0.15	0.15	3694.8	149.2	46.3	0.047	1140	81.3	0.19	4545.9
17	12.95	87.3	0.14	0.15	3408.2	148.4	44.4	0.045	1055	74.4	0.17	4031.6
18	12.77	81.7	0.14	0.15	3347.4	148.1	35.6	0.036	893	77.4	0.18	4403.7
19	12.58	89.0	0.15	0.15	3839.8	148.3	41.9	0.043	1102	77.3	0.18	4668.8
20	12.56	90.1	0.15	0.15	3679.9	148.5	44.3	0.046	1106	72.9	0.17	4152.7
21	12.68	95.9	0.16	0.15	3864.0	148.4	42.5	0.044	1038	72.2	0.17	4086.9
22	12.74	93.7	0.16	0.15	3745.0	148.2	43.9	0.045	1073	72.2	0.17	4058.0
23	12.72	94.4	0.16	0.15	3830.8	148.3	34.0	0.035	832	71.2	0.17	3984.9
24	12.81	97.9	0.16	0.15	3994.0	148.5	41.3	0.042	1025	76.3	0.18	4345.2
25	12.91	103.8	0.17	0.15	4237.8	149.3	41.7	0.042	1034	75.0	0.17	4244.9
26	12.99	98.5	0.16	0.15	3938.5	149.2	42.5	0.043	1045	76.8	0.18	4328.6
27	13.10	103.8	0.17	0.15	4140.5	149.8	35.0	0.035	853	80.7	0.18	4499.3
28	13.08	105.0	0.17	0.15	4156.4	150.7	48.5	0.048	1166	73.4	0.17	4042.5
29	12.87	94.0	0.16	0.15	3799.3	150.9	47.0	0.048	1155	68.1	0.16	3859.0
30	12.63	91.0	0.15	0.15	3721.7	150.8	47.9	0.049	1194	72.2	0.17	4104.3
31	13.05	86.6	0.14	0.15	3484.8	150.5	54.1	0.054	1324	70.0	0.16	3931.4
AVG	12.75	88.8	0.15		3623.5		43.5	0.045	1076	72.8	0.17	4151.8
TONS YTD					404.5				129			444
12-MONTH ROLLING AVG												0.16SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR SEPTEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:06

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.65	95.3	0.16	0.15	3598.5	154.2	81.0	0.161	1259	76.0	0.17	4008.2
02	12.72	102.9	0.17	0.15	3408.9	154.5	57.5	0.059	1137	65.3	0.15	2988.2
03	13.19	99.3	0.16	0.15	3862.2	155.0	44.3	0.044	1052	78.3	0.18	4225.7
04	13.30	93.1	0.15	0.15	3598.9	155.3	40.9	0.040	963	80.0	0.18	4305.8
05	13.17	95.3	0.16	0.15	3753.6	157.1	41.7	0.041	994	80.7	0.18	4408.4
06	12.84	86.8	0.14	0.15	3371.6	157.1	54.3	0.056	1197	70.6	0.16	3772.4
07	12.93	96.8	0.16	0.16#	3802.7	158.3	47.6	0.048	1124	69.3	0.16	3819.3
08	12.91	82.4	0.14	0.16#	3222.0	157.6	51.8	0.053	1167	71.3	0.16	3804.7
09	13.13	95.9	0.16	0.16#	3662.6	157.3	41.2	0.041	961	80.8	0.18	4336.7
10	12.94	95.0	0.16	0.16#	3810.3	157.5	35.7	0.036	872	77.3	0.18	4294.5
11	13.01	91.8	0.15	0.16#	3627.7	157.4	37.1	0.037	889	76.0	0.18	4195.1
12	13.07	92.3	0.15	0.16#	3707.8	157.8	38.4	0.038	932	81.2	0.19	4508.6
13	12.81	83.7	0.14	0.16#	3198.3	156.9	43.6	0.045	953	65.6	0.15	3478.1
14	13.15	95.7	0.16	0.16#	3794.1	156.7	36.7	0.037	892	79.9	0.18	4429.3
15	13.13	91.8	0.15	0.16#	3638.1	155.9	36.0	0.036	878	75.4	0.17	4192.8
16	13.04	86.3	0.14	0.15	2932.9	154.5	39.3	0.039	810	70.9	0.16	3352.0
17	13.14	93.1	0.15	0.15	3602.0	154.9	37.6	0.037	888	83.2	0.19	4472.6
18	13.11	92.1	0.15	0.16#	3583.6	155.1	30.0	0.030	712	81.4	0.19	4393.4
19	13.04	95.8	0.16	0.16#	3723.3	154.9	32.9	0.033	778	75.8	0.17	4117.9
20	13.01	97.9	0.16	0.16#	3863.6	154.9	37.1	0.037	897	80.7	0.18	4450.1
21	13.07	98.3	0.16	0.16#	3939.7	154.6	36.8	0.037	897	85.8	0.20	4785.7
22	13.00	92.8	0.15	0.16#	3644.1	154.5	35.2	0.035	847	80.1	0.18	4384.5
23	12.99	87.3	0.14	0.15	3416.0	154.3	37.5	0.038	896	75.9	0.17	4131.5
24	13.04	90.2	0.15	0.15	3579.7	153.8	37.5	0.038	908	80.1	0.18	4424.5
25	13.10	89.3	0.15	0.15	3633.9	153.0	37.6	0.037	930	85.4	0.19	4814.5
26	13.23	98.2	0.16	0.15	3902.7	153.4	38.6	0.038	932	86.5	0.20	4790.1
27	13.07	86.6	0.14	0.15	3483.6	152.6	37.9	0.038	928	82.9	0.19	4664.6
28	12.56	80.1	0.14	0.15	3363.4	151.6	35.0	0.036	890	66.2	0.16	3843.5
29	12.97	84.8	0.14	0.15	3476.9	151.1	38.4	0.039	956	80.6	0.19	4603.1
30	12.95	90.2	0.15	0.15	3609.6	150.5	36.2	0.036	872	81.5	0.19	4503.6
AVG	13.01	92.0	0.15		3593.7		41.2	0.044	947	77.5	0.18	4216.6
TONS YTD					454.5				154			509

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 30 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR SEPTEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:07

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.68	100.0	0.17	0.15	3884.6	149.8	31.9	0.033	745	71.8	0.17	3908.3
02	12.00	107.8	0.19	0.15	3993.0	150.0	55.7	0.062	1201	68.2	0.17	3434.9
03	12.73	105.1	0.18	0.16#	4092.8	150.5	28.7	0.029	681	76.8	0.18	4155.9
04	12.78	87.5	0.15	0.15	3382.2	151.2	29.7	0.030	702	80.1	0.19	4329.3
05	12.85	91.9	0.16	0.16#	3596.1	151.3	30.8	0.031	725	79.5	0.18	4265.6
06	12.27	83.3	0.15	0.16#	3163.7	151.3	39.7	0.043	859	67.8	0.16	3556.2
07	12.27	89.6	0.16	0.16#	3537.5	151.5	32.1	0.034	766	71.3	0.17	3922.6
08	12.35	86.1	0.15	0.16#	3420.9	152.3	42.8	0.046	984	69.7	0.17	3840.9
09	12.70	96.9	0.16	0.16#	3877.0	152.7	27.4	0.028	661	78.3	0.18	4318.9
10	12.41	83.4	0.15	0.16#	3441.0	153.8	26.3	0.028	659	69.8	0.17	3972.4
11	12.40	84.8	0.15	0.16#	3414.5	153.1	25.8	0.027	630	73.3	0.18	4087.7
12	12.31	84.4	0.15	0.16#	3414.3	152.8	29.1	0.031	716	74.1	0.18	4139.3
13	12.05	73.9	0.13	0.16#	2877.5	151.6	37.8	0.042	834	62.0	0.15	3457.9
14	12.50	79.3	0.14	0.16#	3209.3	150.9	28.6	0.030	703	80.0	0.19	4499.4
15	12.42	90.1	0.16	0.16#	3696.8	150.5	27.4	0.029	684	66.5	0.16	3788.2
16	12.05	78.4	0.14	0.16#	2799.6	150.0	27.7	0.030	598	69.5	0.17	3434.0
17	12.25	86.9	0.15	0.16#	3473.3	149.8	27.4	0.029	666	74.1	0.18	4135.3
18	12.52	83.1	0.14	0.16#	3312.1	149.3	29.0	0.030	701	77.4	0.18	4273.3
19	12.49	78.7	0.14	0.15	3051.8	148.5	30.0	0.031	711	74.4	0.18	4052.5
20	12.55	96.5	0.17	0.15	3883.0	148.9	28.7	0.030	692	76.6	0.18	4252.4
21	12.37	87.7	0.15	0.16#	3482.3	148.9	30.5	0.032	739	77.6	0.19	4319.5
22	12.20	91.6	0.16	0.16#	3600.1	148.9	29.7	0.032	714	75.4	0.18	4128.7
23	12.38	88.1	0.15	0.15	3412.2	148.4	28.8	0.030	679	79.1	0.19	4282.9
24	12.45	83.7	0.15	0.15	3243.8	147.4	31.1	0.033	731	77.8	0.19	4167.6
25	12.40	90.8	0.16	0.15	3684.2	147.2	28.1	0.029	695	78.4	0.19	4401.5
26	12.53	98.3	0.17	0.15	3889.0	147.4	31.8	0.033	770	76.7	0.18	4197.8
27	12.31	89.3	0.16	0.15	3596.6	147.1	29.4	0.031	720	77.0	0.19	4309.6
28	12.32	86.3	0.15	0.15	3586.8	146.4	24.0	0.026	610	70.9	0.17	4123.4
29	12.34	92.1	0.16	0.15	3796.7	146.6	31.0	0.033	780	78.2	0.19	4518.0
30	12.13	84.0	0.15	0.15	3382.7	146.2	35.7	0.038	877	71.7	0.18	4054.1
AVG	12.40	88.7	0.16		3506.5		31.2	0.033	741	74.1	0.18	4077.6
TONS YTD					427.4				114			484

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 30 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR SEPTEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:07

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.90	95.8	0.16	0.15	3753.4	150.5	49.6	0.051	1171	68.5	0.16	3803.9
02	12.48	121.1	0.21	0.15N	3317.6	152.4N	48.4	0.051	791	72.2	0.17	3828.9
03	12.80	108.8	0.18	0.15	4391.1	154.2	38.1	0.039	939	74.3	0.17	4176.6
04	12.80	81.7	0.14	0.15	3304.6	154.7	40.7	0.041	997	80.8	0.19	4515.2
05	12.67	91.6	0.16	0.15	3702.5	155.0	42.5	0.044	1044	79.0	0.19	4451.1
06	12.24	83.8	0.15	0.15	3267.7	155.3	56.5	0.061	1277	61.7	0.15	3403.5
07	12.47	93.2	0.16	0.15	3758.0	155.1	49.6	0.052	1193	72.4	0.17	4062.4
08	12.54	90.8	0.16	0.15	3712.4	155.4	55.1	0.058	1302	64.2	0.15	3665.0
09	12.72	94.1	0.16	0.16#	3801.1	157.0	37.1	0.038	907	78.0	0.18	4366.6
10	12.57	83.8	0.14	0.16#	3480.3	157.5	35.0	0.036	876	79.0	0.19	4530.0
11	12.38	86.4	0.15	0.16#	3528.0	156.9	36.3	0.038	903	83.2	0.20	4739.1
12	12.32	90.7	0.16	0.16#	3748.7	157.1	39.7	0.042	991	73.7	0.18	4231.0
13	12.25	77.4	0.13	0.16#	3036.3	156.2	44.8	0.049	1033	66.0	0.16	3729.1
14	12.80	89.2	0.15	0.16#	3612.1	156.0	40.2	0.041	988	77.7	0.18	4354.9
15	12.71	95.9	0.16	0.16#	3995.9	156.2	38.2	0.039	966	67.8	0.16	3905.9
16	12.57	84.1	0.14	0.16#	3085.4	155.7	38.1	0.040	851	74.1	0.18	3792.6
17	12.62	88.6	0.15	0.16#	3053.4	155.8	34.7	0.036	732	79.0	0.19	3796.7
18	12.72	90.6	0.15	0.16#	3609.0	155.8	28.8	0.030	698	74.9	0.18	4183.4
19	12.84	84.8	0.14	0.16#	3326.3	155.3	34.6	0.035	818	75.6	0.18	4100.7
20	12.81	101.7	0.17	0.16#	4099.3	155.5	40.4	0.041	992	80.0	0.19	4491.6
21	12.75	91.5	0.16	0.16#	3747.0	155.4	41.0	0.042	1016	80.7	0.19	4555.0
22	12.75	86.9	0.15	0.16#	3470.1	155.0	40.6	0.041	980	79.2	0.19	4387.9
23	12.62	89.9	0.15	0.16#	3549.2	154.5	41.2	0.043	992	82.0	0.19	4520.7
24	12.86	88.9	0.15	0.16#	3436.0	153.5	42.5	0.043	1005	78.7	0.18	4263.6
25	12.81	93.2	0.16	0.16#	3779.9	153.3	41.9	0.043	1040	83.1	0.19	4726.9
26	12.98	86.2	0.14	0.15	3414.1	152.3	40.6	0.041	984	83.6	0.19	4641.7
27	12.86	88.5	0.15	0.15	3580.8	151.5	40.6	0.041	1002	80.6	0.19	4533.9
28	12.60	86.1	0.15	0.15	3678.0	151.2	30.5	0.032	787	75.7	0.18	4471.5
29	12.60	87.5	0.15	0.15	3684.2	150.9	41.0	0.042	1045	77.2	0.18	4539.6
30	12.63	91.1	0.16	0.15	3742.6	151.6	41.9	0.043	1045	76.4	0.18	4358.8
AVG	12.66	90.8	0.15		3588.8		41.0	0.042	979	76.0	0.18	4237.6
TONS YTD					458.2				144			507

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 30 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR OCTOBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:07

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	13.08	97.7	0.16	0.15	4003.6	151.0	43.3	0.043	1087	82.7	0.19	4742.6
02	13.15	96.5	0.16	0.15	3824.5	150.9	43.7	0.043	1057	81.0	0.18	4485.3
03	13.04	96.4	0.16	0.15	3919.2	150.9	39.9	0.040	985	82.1	0.19	4640.9
04	13.08	96.8	0.16	0.15	3954.7	151.4	36.9	0.037	913	83.9	0.19	4764.2
05	13.09	108.3	0.18	0.15	4524.3	152.3	36.6	0.037	934	83.2	0.19	4835.4
06	13.17	91.2	0.15	0.15	3696.2	152.7	41.3	0.041	1016	80.7	0.18	4547.5
07	13.05	95.5	0.16	0.15	3923.8	152.9	39.9	0.040	994	82.8	0.19	4725.5
08	13.06	92.4	0.15	0.15	3773.9	153.8	43.1	0.043	1075	81.0	0.18	4596.3
09	13.08	90.8	0.15	0.15	3753.6	153.8	39.9	0.040	1002	82.3	0.19	4717.7
10	12.98	93.3	0.15	0.15	3951.1	153.8	41.2	0.041	1057	81.8	0.19	4817.8
11	12.98	95.6	0.16	0.15	3979.8	154.2	43.4	0.044	1085	79.5	0.18	4569.7
12	12.99	95.7	0.16	0.15	3889.7	154.6	40.6	0.041	1001	82.4	0.19	4667.6
13	13.01	90.4	0.15	0.15	3608.3	155.5	35.1	0.035	847	81.2	0.19	4486.1
14	13.05	95.5	0.16	0.15	4069.2	155.6	34.6	0.035	888	82.9	0.19	4879.8
15	13.18	99.3	0.16	0.15	3957.2	156.0	34.6	0.034	839	82.6	0.19	4625.4
16	13.11	98.8	0.16	0.15	3539.3	156.7	35.0	0.035	765	81.9	0.19	4119.5
17	12.84	96.3	0.16	0.15	3912.6	157.0	37.4	0.038	924	74.5	0.17	4182.5
18	12.77	100.3	0.17	0.15	4015.4	157.2	36.4	0.037	886	77.2	0.18	4312.2
19	12.76	88.1	0.15	0.15	3547.7	156.7	35.2	0.036	864	73.8	0.17	4149.6
20	12.71	80.7	0.14	0.15	3220.6	155.8	36.1	0.037	874	75.2	0.18	4147.0
21	9.18	58.9	0.11	0.15DN	1108.6	155.8DN	409.1	1.464	3851	47.2	0.11	1252.4
22	11.81	93.6	0.17	0.15	3738.5	155.3	133.6	0.236	2628	66.3	0.16	3770.7
23	12.87	81.3	0.14	0.15	3426.3	154.8	42.2	0.043	1073	80.4	0.19	4668.9
24	12.66	91.2	0.16	0.15	3838.4	155.1	42.8	0.044	1072	78.7	0.19	4549.8
25	13.08	95.3	0.16	0.15	3872.1	155.4	45.4	0.045	1113	84.1	0.19	4733.7
26	12.71	47.0	0.08	0.15	1421.5	152.2	78.6	0.081	1291	64.8	0.15	2627.3
27	12.45	43.2	0.07	0.15	1172.4	148.4	83.6	0.088	1386	73.8	0.18	2811.5
28	12.63	97.6	0.17	0.15	3769.4	148.9	53.7	0.055	1255	76.2	0.18	4144.8
29	12.70	89.5	0.15	0.15	3179.3	149.4	49.3	0.051	1049	76.2	0.18	3749.2
30	12.79	83.3	0.14	0.15	3328.5	149.4	56.3	0.058	1322	60.6	0.14	3444.1
31	13.08	92.2	0.15	0.15	3631.3	149.5	39.2	0.039	939	76.2	0.17	4190.0
AVG	12.78	89.4	0.15		3533.9		58.3	0.096	1164	77.3	0.18	4224.4
TONS YTD					508.4				172			573

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR OCTOBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:07

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.39	92.2	0.16	0.15	3866.4	146.2	35.4	0.037	896	74.0	0.18	4279.9
02	12.15	86.4	0.15	0.15	3442.3	145.3	32.2	0.035	781	80.2	0.20	4451.4
03	11.85	87.3	0.16	0.15	3506.2	144.4	39.8	0.046	924	66.5	0.16	3766.4
04	--	--	--	0.15DN	0.0	144.4DN	--	--	0	--	--	0.0
05	6.90	77.8	0.19	0.15D	2062.9	144.4D	109.7	0.350	1295	19.7	0.07	828.6
06	12.11	80.7	0.14	0.15	3265.6	144.2	28.1	0.030	686	64.1	0.16	3613.2
07	12.13	84.9	0.15	0.15	3479.5	144.1	31.3	0.034	787	70.1	0.17	4039.2
08	12.04	88.6	0.16	0.15	3616.5	144.8	32.1	0.035	797	65.7	0.16	3736.4
09	12.22	83.9	0.15	0.15	3357.4	144.5	31.4	0.033	760	70.6	0.17	3915.7
10	11.95	87.3	0.16	0.15	3646.8	144.7	32.4	0.035	821	70.8	0.18	4106.2
11	12.12	90.5	0.16	0.15	3706.7	144.3	33.7	0.036	837	71.0	0.18	4067.6
12	12.11	84.8	0.15	0.15	3433.7	144.5	31.7	0.034	781	70.3	0.17	3924.5
13	12.30	91.5	0.16	0.15	3309.6	145.0	24.2	0.026	534	70.3	0.17	3530.7
14	12.07	88.7	0.16	0.15	3822.0	145.3	28.2	0.031	740	77.1	0.19	4600.9
15	12.09	93.3	0.17	0.15	3778.1	146.3	26.1	0.028	645	77.9	0.19	4380.7
16	11.89	89.7	0.16	0.15	3578.6	146.7	27.5	0.030	670	71.7	0.18	3991.9
17	12.03	92.2	0.16	0.15	3810.7	146.8	27.0	0.029	681	68.2	0.17	3935.4
18	12.15	93.6	0.17	0.16#	3823.2	147.5	27.3	0.029	675	72.8	0.18	4104.4
19	11.86	84.6	0.15	0.16#	3449.6	147.4	31.3	0.034	780	67.2	0.17	3848.4
20	11.74	83.3	0.15	0.16#	3398.3	147.3	32.6	0.036	807	69.6	0.18	3928.3
21	8.04	49.9	0.09	0.16DN	1048.7	147.3DN	456.6	1.865	3627	43.1	0.12	1256.0
22	11.66	98.4	0.18	0.16#	4026.5	148.3	60.4	0.090	1287	68.6	0.17	4031.8
23	11.83	86.0	0.16	0.16#	3699.9	148.0	28.9	0.032	758	69.9	0.18	4202.3
24	12.03	88.3	0.16	0.16#	3658.7	148.3	32.5	0.036	809	73.5	0.18	4219.8
25	11.30	82.3	0.16	0.16#	3524.3	148.0	39.2	0.046	1030	66.6	0.17	3981.8
26	11.68	64.5	0.12	0.16#	1895.0	145.8	65.9	0.074	1091	70.5	0.18	2860.3
27	11.95	71.6	0.13	0.15	1992.9	143.8	66.6	0.073	1123	74.0	0.19	2884.2
28	12.16	102.9	0.18	0.16#	3522.3	144.1	35.5	0.038	740	73.9	0.18	3537.2
29	12.12	90.3	0.16	0.16#	3674.4	143.7	37.7	0.041	910	73.6	0.18	4159.3
30	12.02	76.1	0.13	0.15	3057.4	143.0	38.1	0.042	880	77.4	0.19	4265.9
31	11.99	86.9	0.16	0.15	3489.2	143.3	28.8	0.031	697	67.8	0.17	3793.1
AVG	11.70	85.3	0.15		3224.0		51.7	0.111	898	68.6	0.17	3620.7
TONS YTD					476.5				128			540

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR OCTOBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:07

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.62	96.5	0.16	0.15	4105.7	152.0	44.3	0.046	1150	78.2	0.18	4627.8
02	12.86	98.2	0.16	0.15	3962.1	151.4	44.1	0.045	1085	77.3	0.18	4357.2
03	12.59	93.5	0.16	0.15	3881.9	150.6	39.5	0.041	997	79.3	0.19	4558.9
04	12.76	97.1	0.16	0.15	4016.4	151.5	41.2	0.042	1049	80.3	0.19	4688.7
05	12.81	101.9	0.17	0.15	4351.0	152.2	41.5	0.042	1081	81.1	0.19	4808.9
06	12.67	94.3	0.16	0.15	3989.4	153.2	40.4	0.042	1036	75.9	0.18	4461.5
07	12.61	90.2	0.15	0.15	3799.9	153.3	38.9	0.040	997	77.7	0.18	4559.8
08	12.70	90.9	0.15	0.15	3767.0	153.5	41.9	0.043	1054	76.4	0.18	4363.2
09	12.56	94.1	0.16	0.15	3982.0	153.7	41.8	0.043	1079	76.8	0.18	4527.8
10	12.56	93.0	0.16	0.15	4062.6	154.3	41.9	0.044	1110	74.3	0.18	4514.0
11	12.66	89.9	0.15	0.15	3805.2	154.6	39.5	0.041	1029	76.1	0.18	4535.6
12	12.58	88.7	0.15	0.15	3718.0	154.7	38.2	0.040	974	73.7	0.18	4308.0
13	12.77	87.3	0.15	0.15	3522.2	155.6	37.1	0.038	915	81.1	0.19	4575.9
14	12.51	92.1	0.16	0.15	3956.5	155.9	42.0	0.044	1089	74.8	0.18	4443.5
15	12.60	93.8	0.16	0.15	3863.0	155.6	37.9	0.039	952	79.4	0.19	4552.1
16	12.32	96.8	0.17	0.16#	3884.5	156.4	39.4	0.042	968	67.9	0.16	3787.3
17	12.63	97.0	0.16	0.16#	4042.8	157.0	37.9	0.039	962	81.5	0.19	4714.2
18	12.58	90.9	0.16	0.16#	3753.2	156.8	40.0	0.042	1008	75.7	0.18	4371.0
19	12.40	91.7	0.16	0.16#	3777.2	157.1	44.5	0.047	1118	73.3	0.18	4208.4
20	12.31	91.6	0.16	0.16#	3694.4	156.5	47.5	0.050	1168	69.6	0.17	3900.9
21	10.22	61.8	0.10	0.16DN	965.1	156.5DN	255.6	1.483	683	64.2	0.15	1401.9
22	9.30	65.5	0.12	0.16D#	2335.2	156.5D	363.8	1.663	5862	50.9	0.12	2562.0
23	12.53	85.3	0.15	0.16#	3552.4	156.2	46.3	0.048	1175	76.4	0.18	4432.3
24	12.16	89.1	0.16	0.16#	3717.4	156.4	42.9	0.046	1076	72.3	0.18	4202.6
25	12.46	94.8	0.16	0.16#	3956.4	156.8	40.3	0.042	1018	78.1	0.19	4583.2
26	11.74	57.2	0.10	0.15	1799.4	154.3	77.2	0.087	1360	54.7	0.14	2351.1
27	11.97	71.7	0.13	0.15	2013.9	151.8	73.5	0.080	1248	67.6	0.17	2602.9
28	12.53	94.8	0.16	0.15	3136.4	152.2	45.2	0.047	905	72.1	0.17	3360.9
29	12.65	96.1	0.16	0.16#	3977.3	152.7	41.2	0.043	1013	74.0	0.17	4282.9
30	12.58	84.5	0.14	0.15	3344.3	152.5	52.1	0.055	1231	73.7	0.17	4145.6
31	12.63	90.2	0.15	0.16#	3582.1	152.7	35.3	0.037	852	75.9	0.18	4243.5
AVG	12.35	89.0	0.15		3558.5		61.1	0.145	1201	73.9	0.18	4097.9
TONS YTD					512.5				162			569

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR NOVEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:08

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	11.48	58.1	0.11	0.15DN	416.9	149.5DN	83.2	0.100	317	56.5	0.14	578.9
02	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
03	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
04	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
05	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
06	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
07	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
08	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
09	--	--	--	0.15DN	0.0	149.5DN	--	--	0	--	--	0.0
10	--	--	--	0.15DN	0.0	148.6DN	--	--	0	--	--	0.0
11	11.14	120.2	0.22	0.15DN	2218.5	148.6DN	135.6	0.197	1436	12.3	0.03	303.1
12	12.27	10.9	0.02	0.14	238.8	143.5	147.4	0.157	2010	68.3	0.17	2129.8
13	12.49	14.9	0.03	0.14	341.6	138.5	115.8	0.120	1495	69.9	0.17	2087.4
14	11.61	35.5	0.07	0.14	886.8	133.3	87.2	0.099	1286	51.5	0.13	1804.5
15	11.69	39.3	0.08	0.14D	923.9	133.3D	115.6	0.170	1538	57.2	0.14	1866.4
16	--	--	--	0.14DN	0.0	133.3DN	--	--	0	--	--	0.0
17	--	--	--	0.14DN	0.0	133.3DN	--	--	0	--	--	0.0
18	7.84	42.0	0.12	0.14D	818.9	133.3D	570.9	1.277	7053	2.3	0.01	61.8
19	12.26	24.6	0.04	0.13	602.2	128.8	139.9	0.149	2023	41.4	0.10	1370.7
20	12.10	17.4	0.03	0.13DN	266.7	128.8DN	150.5	0.170	1405	65.4	0.16	1433.3
21	6.16	30.2	0.08	0.13D	784.6	128.8D	637.6	2.610	9057	20.4	0.08	816.8
22	12.54	78.3	0.13	0.13	2951.6	127.6	48.7	0.051	1108	77.9	0.18	4039.5
23	7.68	106.3	0.30	0.13DN	21.9	127.6DN	222.2	0.378	28	11.3	0.04	2.9
24	10.27	87.0	0.15	0.13D	2966.1	127.6D	259.5	1.132	3882	54.9	0.14	2676.1
25	13.00	100.1	0.17	0.13	4156.4	128.4	44.4	0.045	1126	81.2	0.19	4697.6
26	13.07	93.8	0.15	0.13	3807.9	128.9	44.2	0.044	1104	81.4	0.19	4636.2
27	12.91	98.0	0.16	0.13	4126.5	129.1	41.2	0.042	1029	74.1	0.17	4368.7
28	12.89	108.6	0.18	0.13	4508.8	129.6	40.2	0.041	1018	82.5	0.19	4771.9
29	12.53	95.1	0.16	0.13	4087.3	129.4	44.2	0.046	1157	76.8	0.18	4581.1
30	12.83	100.0	0.17	0.13	4271.2	129.8	38.2	0.039	994	79.4	0.19	4739.8
AVG	11.41	66.3	0.12		1279.9		156.1	0.361	1302	56.0	0.14	1565.6
TONS YTD					512.6				173			578
12-MONTH ROLLING AVG												0.17SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 11 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR NOVEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:08

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	10.49	44.9	0.10	0.15DN	254.5	143.3DN	95.4	0.143	257	50.9	0.15	399.6
02	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
03	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
04	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
05	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
06	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
07	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
08	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
09	--	--	--	0.15DN	0.0	143.3DN	--	--	0	--	--	0.0
10	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
11	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
12	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
13	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
14	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
15	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
16	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
17	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
18	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
19	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
20	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
21	--	--	--	0.15DN	0.0	142.9DN	--	--	0	--	--	0.0
22	11.21	131.1	0.25	0.15DN	1581.2	142.9DN	43.1	0.050	316	51.0	0.13	853.0
23	10.54	95.1	0.18	0.15DN	2098.5	142.9DN	115.4	0.579	888	64.9	0.17	1990.6
24	9.69	85.3	0.17	0.16#	3352.8	142.3	228.4	0.766	3770	43.2	0.11	2481.6
25	11.60	102.6	0.19	0.16#	4596.3	144.4	35.5	0.040	963	70.6	0.18	4415.2
26	11.51	69.5	0.13	0.16#	3071.8	144.1	34.3	0.039	924	68.8	0.18	4257.4
27	11.36	82.0	0.16	0.16#	3757.5	144.6	36.0	0.042	973	67.0	0.18	4235.1
28	11.39	91.9	0.17	0.16#	4142.0	145.3	33.9	0.039	923	67.5	0.18	4238.1
29	11.34	85.1	0.16	0.16#	4079.4	145.5	30.2	0.035	879	68.6	0.18	4598.0
30	11.46	83.1	0.16	0.16#	3970.4	146.2	29.7	0.034	865	70.5	0.18	4715.7
AVG	11.06	87.1	0.17		1030.1		68.2	0.177	359	62.3	0.16	1072.8
TONS YTD					480.5				129			544
12-MONTH ROLLING AVG												0.17SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 8 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR NOVEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:08

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	10.83	42.9	0.09	0.15	1104.2	149.3	149.7	0.323	2366	49.6	0.13	1754.2
02	11.65	32.3	0.06	0.15	906.1	144.9	64.0	0.072	1083	64.5	0.17	2498.8
03	11.64	39.0	0.07	0.15	1129.8	141.0	68.9	0.077	1171	65.4	0.17	2558.5
04	10.77	30.5	0.06	0.14	823.1	136.9	148.4	0.295	2507	48.3	0.13	1815.5
05	11.63	18.3	0.03	0.14	503.4	132.0	79.7	0.090	1333	64.5	0.17	2480.3
06	11.68	20.9	0.04	0.13	571.5	126.9	70.7	0.079	1157	65.0	0.17	2436.6
07	11.81	19.3	0.03	0.13	494.8	122.0	64.1	0.071	1025	64.7	0.16	2362.9
08	11.21	25.3	0.06	0.13D	556.3	122.0D	93.7	0.140	1049	65.5	0.18	2120.7
09	--	--	--	0.13DN	0.0	122.0DN	--	--	0	--	--	0.0
10	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
11	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
12	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
13	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
14	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
15	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
16	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
17	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
18	--	--	--	0.13DN	0.0	119.3DN	--	--	0	--	--	0.0
19	1.28	4.1	0.05	0.13DN	5.8	119.3DN	66.3	0.530	61	5.8	0.10	12.7
20	4.71	29.2	0.09	0.13DN	704.7	119.3DN	545.8	2.932	7532	41.4	0.16	1372.2
21	10.68	51.6	0.10	0.13	1456.8	115.8	96.7	0.119	1673	18.9	0.05	759.9
22	11.20	77.3	0.15	0.13	2868.3	114.5	116.8	0.175	2099	48.2	0.12	2560.8
23	11.60	71.1	0.13	0.13DN	1578.3	114.5DN	117.3	0.636	1232	63.3	0.15	1951.3
24	10.67	94.0	0.17	0.13	3528.1	114.3	209.1	0.909	4028	48.6	0.12	2708.9
25	12.46	126.5	0.22	0.13	5429.4	117.2	40.8	0.043	1067	71.0	0.17	4232.6
26	12.08	86.6	0.15	0.13	3712.4	117.5	49.2	0.053	1282	65.1	0.16	3868.1
27	11.68	89.7	0.16	0.13	3654.5	117.1	59.8	0.069	1370	55.1	0.14	3238.3
28	12.48	105.1	0.18	0.13	4510.2	118.0	41.2	0.043	1078	73.5	0.18	4419.5
29	12.46	99.3	0.17	0.13	4349.3	118.5	40.7	0.043	1078	74.3	0.18	4526.9
30	12.51	102.8	0.18	0.13	4557.4	119.2	36.2	0.038	980	75.9	0.18	4699.6
AVG	10.75	58.3	0.11		1414.8		108.0	0.337	1172	56.4	0.15	1745.9
TONS YTD					519.8				169			583
12-MONTH ROLLING AVG												0.17SO2 lb/mmbtu 12-Months Rolling

Avg Info: Valid Days = 11 - Valid Months = 0

---------- FOOTNOTES ----------
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1A MONTHLY EMISSIONS REPORT FOR DECEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:09

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.97	104.8	0.17	0.13	4451.9	130.4	42.5	0.043	1092	82.1	0.19	4826.2
02	12.79	106.8	0.18	0.14	4538.6	131.2	39.8	0.041	1027	81.3	0.19	4789.3
03	12.94	94.1	0.16	0.14	3785.7	131.3	45.8	0.046	1122	83.2	0.19	4651.1
04	12.95	104.4	0.17	0.14	4114.6	131.7	42.3	0.043	998	83.6	0.19	4555.4
05	12.90	86.8	0.14	0.13	3558.6	131.2	41.5	0.042	1029	81.0	0.19	4640.2
06	12.95	83.8	0.14	0.13	3332.3	131.2	42.2	0.042	1009	76.3	0.18	4222.4
07	12.62	82.7	0.14	0.13	3504.9	131.5	45.5	0.047	1168	77.2	0.18	4530.3
08	12.68	89.2	0.15	0.13	3286.8	131.3	46.7	0.048	1043	77.5	0.18	3986.8
09	12.89	95.8	0.16	0.13	3825.6	131.8	47.6	0.048	1158	79.2	0.18	4418.2
10	12.87	97.4	0.16	0.13DN	2527.1	131.8DN	43.8	0.044	692	81.4	0.19	2933.0
11	9.68	62.1	0.12	0.13DN	1644.2	131.8DN	324.6	1.538	3913	55.7	0.14	2103.6
12	12.11	94.8	0.16	0.13D	3385.4	131.8D	96.7	0.242	1391	68.1	0.17	3409.5
13	12.28	91.3	0.16	0.13	3408.4	131.0	54.1	0.058	1199	67.0	0.16	3508.1
14	12.89	95.6	0.16	0.14	3862.8	130.7	42.7	0.043	1036	72.8	0.17	4064.9
15	12.53	82.4	0.14	0.14	3349.8	133.4	46.4	0.049	1026	69.1	0.16	3814.2
16	12.62	74.8	0.13	0.14 -20444950.0		136.2	43.4	0.046-20446500		65.5	0.16 -20444500.0	
17	12.80	94.6	0.16	0.14	3828.7	136.1	37.5	0.038	924	76.2	0.18	4277.6
18	12.89	84.1	0.14	0.14	3477.3	136.0	37.1	0.038	917	79.9	0.19	4553.8
19	12.88	72.3	0.12	0.14	2927.1	135.4	41.5	0.042	971	77.3	0.18	4211.5
20	12.83	88.0	0.15	0.14	3551.8	135.0	43.4	0.044	1019	75.7	0.18	4194.3
21	12.87	106.5	0.18	0.14	4296.8	136.6	44.5	0.045	1071	77.0	0.18	4275.6
22	12.88	98.8	0.16	0.14	3910.7	137.5	51.1	0.052	1172	69.9	0.16	3774.4
23	12.71	97.9	0.16	0.15	3867.1	142.3	49.1	0.051	1129	54.3	0.13	3110.6
24	12.68	86.4	0.15	0.15	3475.0	146.3	45.3	0.047	1076	75.9	0.18	4186.7
25	12.31	82.9	0.14	0.15	3374.6	149.7	46.3	0.049	1087	70.6	0.17	3914.5
26	12.61	87.0	0.15	0.15	3491.3	153.6	43.1	0.045	1013	80.4	0.19	4387.9
27	12.54	83.4	0.14	0.16#	3343.4	153.9	42.8	0.045	1013	79.0	0.19	4367.3
28	12.53	82.9	0.14	0.15	3285.6	152.4	44.9	0.047	1033	78.8	0.19	4250.1
29	12.49	86.2	0.15	0.15	3469.8	151.6	47.7	0.050	1110	76.6	0.18	4195.1
30	12.69	99.4	0.17	0.15	3999.9	151.7	39.7	0.041	945	76.9	0.18	4294.0
31	12.98	103.4	0.17	0.15	4208.1	151.6	32.3	0.032	798	82.8	0.19	4687.3
AVG	12.62	90.3	0.15		-656060.2		54.6	0.100	-658462	75.2	0.18	-655527.9
TONS YTD					515.6				173			581

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

FOOTNOTES
* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1B MONTHLY EMISSIONS REPORT FOR DECEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:09

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	11.40	89.3	0.17	0.16#	4178.6	146.9	29.9	0.034	851	69.7	0.18	4543.4
02	11.32	79.4	0.15	0.16#	3713.7	146.7	28.2	0.032	794	69.5	0.18	4525.0
03	11.34	83.3	0.16	0.16#	3715.6	146.9	30.0	0.035	818	69.2	0.18	4273.4
04	11.40	94.2	0.18	0.16#	4183.2	147.5	30.7	0.035	816	72.0	0.19	4403.1
05	11.44	76.3	0.14	0.16#	3438.9	147.0	30.1	0.034	824	71.9	0.19	4529.6
06	11.24	74.8	0.14	0.16#	3288.6	146.6	28.9	0.034	765	66.7	0.18	4075.4
07	11.28	78.1	0.15	0.16#	3627.6	146.6	30.5	0.035	864	67.3	0.18	4370.8
08	10.96	77.3	0.15	0.16#	3223.6	146.1	28.3	0.034	717	63.5	0.17	3679.2
09	11.39	83.9	0.16	0.16#	3719.6	146.0	31.6	0.036	852	73.0	0.19	4510.3
10	11.16	78.5	0.15	0.16#	3678.5	146.2	28.6	0.034	814	70.2	0.19	4567.1
11	11.23	78.3	0.15	0.16#	3630.8	146.4	28.5	0.033	797	69.8	0.19	4497.8
12	11.19	62.3	0.12	0.15	2696.1	144.8	27.3	0.032	717	70.0	0.19	4201.2
13	11.15	69.4	0.13	0.15	3174.3	144.0	29.2	0.034	755	66.4	0.18	4104.2
14	11.02	80.0	0.16	0.15	3683.0	143.8	31.1	0.037	854	60.8	0.16	3873.5
15	10.86	77.1	0.15	0.15	3477.7	143.5	36.3	0.043	905	57.1	0.16	3548.0
16	10.64	76.8	0.15	0.15	3474.2	145.7	35.6	0.044	902	61.8	0.17	3561.1
17	10.97	89.5	0.18	0.15	3431.4	148.8	27.0	0.032	627	63.3	0.17	3365.1
18	11.03	72.0	0.14	0.15	3364.3	147.9	22.9	0.027	632	67.5	0.18	4343.5
19	11.08	77.7	0.15	0.15	3476.2	147.7	26.4	0.031	687	68.4	0.18	4241.3
20	10.97	81.7	0.16	0.15	3683.8	148.6	27.8	0.033	723	66.5	0.18	4138.5
21	10.94	83.2	0.16	0.15	3772.2	148.8	31.5	0.038	843	66.5	0.18	4195.0
22	11.16	90.9	0.17	0.16#	4112.2	149.6	32.3	0.038	823	60.6	0.16	3726.6
23	10.82	77.4	0.15	0.16#	3370.6	149.5	31.5	0.038	781	54.3	0.15	3206.6
24	10.82	74.7	0.15	0.15	3448.2	149.5	26.7	0.032	716	59.2	0.16	3722.9
25	10.60	74.9	0.15	0.15	3475.0	147.6	30.1	0.037	786	57.0	0.16	3576.6
26	10.70	69.7	0.14	0.15	3277.1	147.6	31.6	0.039	861	63.9	0.18	4087.3
27	10.69	66.5	0.13	0.15	3105.2	146.9	26.6	0.033	721	65.4	0.18	4137.1
28	10.43	71.7	0.15	0.15	3328.8	146.1	27.3	0.034	730	62.6	0.18	3969.2
29	10.48	66.8	0.14	0.15N	1636.6	145.2N	28.6	0.035	414	64.6	0.19	2126.1
30	10.10	78.7	0.17	0.15	3915.5	145.5	26.1	0.034	772	62.0	0.18	4235.7
31	9.82	70.9	0.15	0.15	3659.0	145.0	27.1	0.036	852	61.0	0.19	4399.3
AVG	10.96	77.6	0.15		3482.6		29.3	0.035	775	65.2	0.18	4023.7
TONS YTD					482.5				129			547

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

FOOTNOTES
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I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758

CEDAR BAY GENERATING COMPANY, LP - JACKSONVILLE, FL
PSD-FL-137

BOILER 1C MONTHLY EMISSIONS REPORT FOR DECEMBER 1998
REPORTING DATE, TIME: 01/15/1999, 10:09

	Boiler											
DAY	CO2 %	NOX PPM	NOX LB/MMBTU	NOX MMBTU 30-DRA	NOX LB/DAY	NOX LB 30-DRA	CO PPM	CO LB/MMBTU	CO LB/DAY	SO2 PPM	SO2 LB/MMBTU	SO2 LB/DAY
01	12.44	96.9	0.17	0.13	4133.7	119.8	38.1	0.040	991	76.1	0.18	4493.2
02	12.66	98.0	0.17	0.13	4101.0	120.2	40.2	0.041	1017	79.2	0.19	4559.6
03	12.67	101.8	0.17	0.13	4037.6	120.8	43.0	0.044	1039	79.3	0.19	4388.6
04	12.75	105.1	0.18	0.13	4156.8	121.9	45.6	0.047	1082	81.7	0.19	4426.2
05	12.69	90.8	0.15	0.13	3765.4	121.8	46.6	0.048	1170	82.2	0.19	4710.9
06	12.42	85.1	0.15	0.13	3487.7	121.2	44.3	0.047	1082	76.4	0.18	4320.7
07	12.66	96.0	0.16	0.13	4041.3	124.3	41.8	0.043	1075	79.8	0.19	4733.9
08	12.44	79.2	0.14	0.13	2962.7	126.0	41.8	0.044	954	78.6	0.19	4098.0
09	12.82	95.6	0.16	0.13	3827.9	126.0	39.4	0.040	962	83.5	0.19	4621.8
10	12.48	89.6	0.15	0.13	3790.8	125.4	40.1	0.042	1043	77.2	0.19	4598.1
11	12.52	93.6	0.16	0.14	3957.4	125.9	42.1	0.044	1080	79.0	0.19	4622.2
12	12.39	84.2	0.14	0.13	3268.9	125.3	44.5	0.047	1057	79.2	0.19	4323.2
13	12.23	85.2	0.15	0.14	3521.2	128.2	51.0	0.055	1210	70.1	0.17	4005.4
14	12.33	86.4	0.15	0.14	3608.1	131.9	44.9	0.048	1111	73.2	0.18	4220.7
15	12.05	90.0	0.16	0.14	3588.3	135.3	52.9	0.059	1182	63.8	0.16	3670.5
16	11.94	82.2	0.15	0.15	3307.7	138.8	48.0	0.053	1121	64.3	0.16	3656.2
17	12.42	98.3	0.17	0.15	4013.1	144.0	37.4	0.039	930	77.4	0.19	4422.4
18	12.18	75.4	0.13	0.15N	2213.6	148.0N	39.1	0.042	679	75.3	0.19	3048.5
19	12.21	85.7	0.15	0.16#	3484.0	152.4	42.5	0.046	1008	73.2	0.18	4072.3
20	12.18	82.5	0.14	0.16#	3267.1	151.9	48.3	0.052	1134	72.7	0.18	4013.7
21	12.07	88.1	0.16	0.16#	3591.8	151.8	53.4	0.058	1284	71.9	0.18	4016.4
22	12.06	97.1	0.17	0.16D#	2980.2	151.8D	57.7	0.064	993	58.4	0.14	2470.7
23	12.27	90.2	0.16	0.16#	3647.3	154.7	52.7	0.057	1242	67.3	0.16	3778.4
24	12.35	80.6	0.14	0.16#	3259.8	155.0	47.3	0.050	1123	72.8	0.18	4051.9
25	12.18	82.2	0.14	0.16#	3291.7	154.5	50.3	0.054	1162	73.7	0.18	4051.3
26	12.30	86.8	0.15	0.16#	3512.1	151.4	48.8	0.052	1159	75.3	0.18	4166.2
27	12.43	82.9	0.14	0.16#	3311.9	150.6	46.9	0.049	1097	77.7	0.19	4245.9
28	12.23	83.8	0.15	0.16#	3344.7	150.4	51.0	0.055	1187	72.9	0.18	4007.5
29	12.07	91.2	0.16	0.16#	3629.1	149.5	50.0	0.054	1164	73.0	0.18	3981.4
30	12.31	88.0	0.15	0.15	3502.6	148.6	43.4	0.046	1017	73.6	0.18	4050.2
31	12.36	94.6	0.16	0.15	3996.4	148.2	35.5	0.037	908	76.9	0.19	4498.4
AVG	12.36	89.3	0.15		3567.8		45.4	0.048	1073	74.7	0.18	4139.5
TONS YTD					522.3				170			586

12-MONTH ROLLING AVG 0.17SO2 lb/mmbtu 12-Months Rolling
Avg Info: Valid Days = 31 - Valid Months = 0

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* = Excess Emissions Alarm # = Excess Emissions Warning
I = Invalid Data D = Boiler Offline
N = Data Did Not Meet The Minimum Requirements

EMISSION LIMITS	LB/MMBTU	LB/HR	TONS/YR
NOX	0.17 30-DRA	180.7 30-DRA	736.1
SO2	0.20 12-MRA	NONE	866
CO	NONE	NONE	758