

Florida Department of
Environmental Protection

Memorandum

TO: Trina Vielhauer
THRU: J. K. Pennington *JKP*
FROM: M. P. Halpin *MH*
DATE: October 28, 2004
SUBJECT: Cedar Bay AC Permit
Test burn to co-fire 5% TDF
DEP File No. 0310337-008-AC, PA 88-24

Attached is the public notice package for Cedar Bay Cogeneration Facility. This is an existing coal-fired facility which has three fluidized bed boilers (CFB's), feeding steam to one steam turbine.

The applicant has requested permission to fire a blend of up to 5% tire derived fuel (TDF) for 30 full power burn days, or 60 calendar days, whichever comes first. Based upon the submitted information and other readily available documentation, I believe that this type of boiler (a CFB) is well-suited to combusting such a fuel. Additionally, it is expected that the only potential increase in emissions would be that of SO₂, potentially causing an increase of less than 3 tons for the test duration.

According to the Scrap Tire Management Council, the standard assumption is that waste (also known as scrap) tires are generated at a rate of one tire per person per year. Given the magnitude of this nationwide issue, it does not seem unreasonable to allow a well-designed facility such as Cedar Bay to test scrap tires as a fuel for heat recovery and electrical generation.

I recommend your approval.

JKP/mph

Attachments



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

November 1, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Martin Kreft
General Manager
Cedar Bay Generating Co., L.P.
9640 Eastport Road
Jacksonville, Florida 32218

Re: Cedar Bay Cogeneration Facility
TDF Test Burn
AIRS ID No. 0310337-008-AC, PSD-FL-137 and PA 88-24

Dear Mr. Kreft:

Enclosed is one copy of the Draft Air Construction Permit relative to the request from Cedar Bay Generating Co., L.P. to test burn a 5% blend of tire derived fuel (TDF) in your cogeneration facility (Boiler C). The above facility is located in Jacksonville, Duval County.

The Public Notice of Intent to Issue Air Construction Permit 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.

Please submit any written comments you wish to have considered concerning the Department's proposed action to J. K. Pennington, P.E., Administrator, North Permitting Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin, P.E. at 850/921-9519.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TV/mph

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an
Application for Permit by:

Mr. Martin Kreft, General Manager
Cedar Bay Generating Co., L.P.
9640 Eastport Road
Jacksonville, Florida 32218

DEP File No. 0310337-008-AC (PA 88-24)

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit (copy of Draft permit attached) for the proposed project, detailed in the application specified above and for the reasons stated below.

The applicant, Martin Kreft, General Manager – Cedar Bay Generating Company, L.P., applied on October 25, 2004, to the Department for an Air Construction Permit at its Cedar Bay Cogeneration Facility, located in Jacksonville, Duval County. The request is to conduct a test burn, co-firing a 5% blend of TDF (tire derived fuel) in Boiler "C" for up to 60 calendar days or 30 full-power burn days (whichever comes first). A full power burn day is defined as operation for 24 hours at full load.

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, 62-212 and 40 CFR 52.21. The above actions are not exempt from permitting procedures. The Department has determined that an Air Construction Permit is required relative to temporary power installations.

The Department intends to issue this Air Construction Permit 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, and 62-297, F.A.C. and 40 CFR 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 Air Construction Permit. 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 concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of Public Notice of Intent to Issue Air Construction Permit. 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.

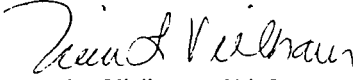
In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal 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.


Trina Vielhauer, Chief
Bureau of Air Regulation

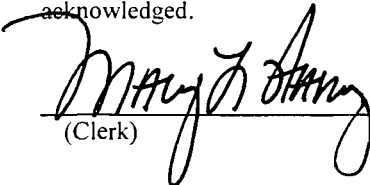
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice of Intent to Issue Air Construction Permit and the Draft Air Construction Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11/04/04 to the person(s) listed:

Martin Kreft, Cedar Bay *
Jeff Walker, Cedar Bay
Gregg Worley, EPA
John Bunyak, NPS
Chris Kirts, NED
Steve Pace, Duval County ERMD
Ken Kosky, Golder
Hamilton S. Oven, DEP-Siting

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) 11/04/04
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0310337-008-AC (PA 88-24)

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

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit for Cedar Bay Cogeneration Facility, located at 9640 Eastport Road, Jacksonville, Duval County. The permit allows for a test burn, co-firing a 5% blend of TDF (tire derived fuel) in Boiler "C" for up to 60 calendar days or 30 full power burn days (whichever comes first). A full power burn day is defined as operation for 24 hours at full load. This is an existing facility, which combusts primarily coal. A Determination of Best Available Control Technology (BACT) was not required, since there will be no significant increases in criteria pollutants as defined by Table 62-212.400-2 of the Florida Administrative Code. The applicant's mailing address is: P.O. Box 26324, Jacksonville FL 32226-6324.

An air quality impact analysis was not required. 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 concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. 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 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;

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

(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:

Florida Department of
Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 488-1344
Fax: (850) 922-6979

Florida Department of
Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256
Telephone: (904) 807-3300

The complete project file includes the application, Draft permit, and the information submitted by the Responsible Official, exclusive of confidential records under Section 403.111, F.S. Interested persons may review specific details of this project by contacting the Administrator, North Permitting Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

DRAFT

November 1, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Martin Kreft
General Manager
Cedar Bay Generating Co., L.P.
9640 Eastport Road
Jacksonville, Florida 32218

File No. 0310337-008-AC, PA 88-24
SIC No. 4911
Expires: April 1, 2005

Re: Cedar Bay Cogeneration Facility
TDF Test Burn
AIRS ID No. 0310337-008-AC, PSD-FL-137 and PA 88-24

Dear Mr. Kreft:

The Department has reviewed the request from Cedar Bay Generating Co., L.P. received on October 25, 2004 concerning the burning of a 5% blend of tire derived fuel (TDF) in your cogeneration facility (Boiler C) located in Duval County, Florida.

You are hereby authorized to conduct performance tests on one boiler ("C") at this (Cedar Bay Cogeneration) facility while burning a blend of up to 5 percent TDF (by weight) with coal, or an equivalent of approximately 5 tons per hour at full load. The testing period shall not exceed 30 full power burn days and shall conclude within 60 days from the first day TDF is burned in the boiler. A full power burn day is defined as operation for 24 hours at full load. Test results must include a material balance (fuels, emissions, bottom ash, and fly ash) of the metals in the fuels. All conditions of existing permits related to air pollution emission limits and control equipment remain in force during the test burn.

A performance test shall be conducted during the testing period in order to gather data regarding air pollutant emissions, any operation limitations on burning a blend of up to 5 percent by weight TDF in the boiler, and to determine the metal content in the bottom (bed) and fly ash. The test results as well as an engineering analysis identifying any changes required to the facility in order to sustain continued TDF firing on a permanent basis shall be sent to the Department's Bureau of Air Regulation within 60 days of completion of the tests.

The performance test shall be subject to the following conditions:

1. The permittee shall notify the Duval County Environmental Resource Management Department Environmental Quality Division, the DEP Northeast District, and the Bureau of Air Regulation at least one day prior to burning TDF and 15 days prior to commencement of the performance test. A written test report shall be submitted to these offices within 60 days of completion of the last test run. Notification shall also occur within 5 days, in writing, upon completion of the final test.
2. The maximum feed rate of TDF to the "C" boiler at the Cedar Bay Cogeneration facility shall not exceed 5 tons per hour or 5 percent by weight of the total feed rate, whichever is less.

DRAFT

Mr. Martin Kreft
November 1, 2004
Page 2

3. The testing series shall include emissions tests for the maximum TDF blend (up to 5 percent) with the boiler operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the capacity allowed by Permit No. PSD-FL-137 (and subsequent revisions). Testing shall be conducted in accordance with the test plan, and incorporated as Attachment "A".
4. Stack emissions related to TDF co-firing shall not exceed any limit within existing permits.
5. Emissions tests shall be conducted and results reported for PM, PM10, Pb, Hg, Be, VOC's and sulfuric acid mist using test methods defined in Specific Condition A.34. of the facility's Title V permit. CEMS data shall be recorded and analyzed for sulfur dioxide, nitrogen oxides, opacity and heat input.
6. Based on the data collected during the test burn, estimate the potential emissions that will occur if the maximum amount of TDF requested is burned in the facility on a permanent basis. For rule applicability determination, calculate any change in emissions (lbs/hr and TPY) for all air pollutants that would result from the firing of a blend of TDF compared with presently permitted scenarios.
7. To provide reasonable assurance that this fuel blend can be burned in compliance with the air regulations, as-burned fuel samples (coal and TDF), bottom ash, and fly ash shall be collected and analyzed for total metals content (selenium, silver, chromium, copper, arsenic, cadmium, zinc, mercury, lead, and beryllium) throughout the test burn of the blended fuel. Weekly composite of daily samples shall be required as well as analyses of a composite sample collected during the particulate matter tests. A one-time, individual sample of each fuel (TDF and coal) shall be required to be analyzed prior to beginning the test burn, in order to ensure the validity of the composite sample.

To provide reasonable assurance that the ash generated from this fuel blend can be disposed of in compliance with the solid and hazardous waste regulations, representative samples of the fly and bottom ash generated as the result of burning coal and TDF shall be sampled and analyzed in accordance with the requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846", Method 3050. The constituents within the metals shall also be analyzed using the Toxic Characteristic Leaching Procedure (TCLP, Method 1311 of SW-846).

- a) A minimum of two composite samples each of fly and bottom ash shall be collected and analyzed at the beginning of the sampling event for organic constituents listed in 40 CFR 261.24 Table I using SW-846 test method 1311 (TCLP). If organic constituents are present, then the remainder of the composite samples collected shall be analyzed for organic constituents listed in 40 CFR 261.24 Table I using SW-846 test method 1311 (TCLP).
- b) Representative samples shall account for variability in both the fly and bottom ash. The US EPA's protocol entitled "Guidance For Sampling and Analysis of Municipal Waste Combustion Ash For the Toxicity Characteristic" shall be used as guidance for collecting, handling, storing and analyzing a representative sample.
- c) Representative composite samples of fly and bottom ash shall be analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc using SW-846 test method 1311 (TCLP) and 3050 (total metals digestion).
- d) Daily composite samples of the blended fuel, coal mixed with TDF, shall be collected during the ash sampling period and analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc using SW-846 test method 3050. The blended fuel mixture, coal and TDF, samples shall be blended and reduced in size to pass through a #60 mesh screen prior to analysis of specific chemicals.

DRAFT

8. A material balance of the metals in the fuel, emissions, bottom ash and fly ash shall be performed and reported based on all test/analytical data.
9. Any performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C.
10. Daily records (i.e., mass feed rates of each fuel, heat input, steam production, pressure, temperature, MW, fuel input rates, etc.) of the boiler operations when firing the TDF blend during the tests shall be maintained.
11. The authorized TDF performance test shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C.
12. Performance testing shall cease as soon as possible if the test boiler operations are not in accordance with the conditions within existing permits, or this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
13. This Department action is only to authorize the TDF blend performance test. Any firing of tire derived fuel beyond the 30 full-power burn days (or 60 calendar days) of testing approved to conduct such tests will be deemed a violation of permit No. PSD-FL-137.
14. Unless otherwise specified herein, the test protocol submitted by the applicant, and received by FDEP on October 25, 2004, including the sampling and analysis methods of fuel and ash, is acceptable and incorporated herein as Attachment "A".

This letter must be attached to permit No. PSD-FL-137 and shall become a part of the permit.

Sincerely,

Michael G. Cooke, Director
Division of Air Resource
Management

TV/mh

Best Available Copy

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

7000 1670 0013 3109 9113

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

Postmark
Here

Sent To
 Mr. Martin Kreft, General Manager
 Cedar Bay Generating Co., L.P.
 9640 Eastport Road
 Jacksonville, Florida 32218

PS Form 3800, May 2000 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Shelly Arnold</i> C. Date of Delivery <i>11/8/04</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below</p>
<p>Article Addressed to:</p> <p>Mr. Martin Kreft General Manager Cedar Bay Generating Co., L.P. 9640 Eastport Road Jacksonville, Florida 32218</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail</p>
<p>2. Article Number 7000 1670 0013 3109 9113</p> <p>(Transfer from service label)</p>	
<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

RECEIVED
NOV 10 2004
BUREAU OF AIR REGULATION

• Sender: Please print your name, address, and ZIP+4 in this box.

Dept. of Environmental Protection
 Division of Air Resources Mgt.
 Bureau of Air Regulation, NSR
 2600 Blair Stone Rd., MS 5505
 Tallahassee, FL 32399-2400

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

OFFICIAL USE

7000 1670 0013 3109 9113

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

Postmark
Here

Sent To
 Mr. Martin Kreft, General Manager
 Cedar Bay Generating Co., L.P.
 9640 Eastport Road
 Jacksonville, Florida 32218

PS Form 3800, May 2000

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:
 Mr. Martin Kreft
 General Manager
 Cedar Bay Generating Co., L.P.
 9640 Eastport Road
 Jacksonville, Florida 32218

2. Article Number **7000 1670 0013 3109 9113**
 (Transfer from service label)

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Addressee
 B. Received by (Printed Name) **Shelly Arnold**
 C. Date of Delivery **11/8/04**
 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No



3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail

4. Restricted Delivery? (Extra Fee) Yes No

UNITED STATES POSTAL SERVICE



First-Class Mail
 Postage & Fees Paid
 USPS
 Permit No. G-10

RECEIVED
 NOV 10 2004

• Sender: Please print your name, address, and ZIP+4 in this box.

Dept. of Environmental Protection
 Division of Air Resources Mgt.
 Bureau of Air Regulation, NSR
 2600 Blair Stone Rd., MS 5505
 Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

Memorandum

Florida Department of
Environmental Protection

TO: Michael G. Cooke

THRU: *for* Trina Vielhauer *HKP*
J. K. Pennington *JKP*

FROM: Michael P. Halpin *MN*

DATE: December 7, 2004

SUBJECT: Cedar Bay Generating Co., L.P.
TDF Test Burn
DEP File No. 0310337-008-AC, PA 88-24

Attached is the final air construction permit for Cedar Bay Cogeneration Facility. This is an existing coal-fired facility which has three fluidized bed boilers (CFB's), feeding steam to one steam turbine.

The applicant has requested permission to fire a blend of up to 5% tire derived fuel (TDF) for 30 full power burn days, or 60 calendar days, whichever comes first. Based upon the submitted information and other readily available documentation, I believe that this type of boiler (a CFB) is well-suited to combusting such a fuel. Additionally, it is expected that the only potential increase in emissions would be that of SO₂, potentially causing an increase of less than 3 tons for the test duration.

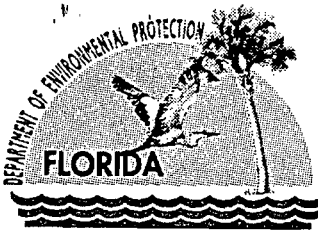
According to the Scrap Tire Management Council, the standard assumption is that waste (also known as scrap) tires are generated at a rate of one tire per person per year. Given the magnitude of this nationwide issue, it does not seem unreasonable to allow a well-designed facility such as Cedar Bay to test scrap tires as a fuel for heat recovery and electrical generation.

Notice was published in the Florida Times-Union on November 22, 2004. No comments were received.

I recommend your approval.

Attachments

/mph



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

December 7, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Martin Kreft
General Manager
Cedar Bay Generating Co., L.P.
9640 Eastport Road
Jacksonville, Florida 32218

File No. 0310337-008-AC, PA 88-24
SIC No. 4911
Expires: April 1, 2005

Re: Cedar Bay Cogeneration Facility
TDF Test Burn
AIRS ID No. 0310337-008-AC, PSD-FL-137 and PA 88-24

Dear Mr. Kreft:

The Department has reviewed the request from Cedar Bay Generating Co., L.P. received on October 25, 2004 concerning the burning of a 5% blend of tire derived fuel (TDF) in your cogeneration facility (Boiler C) located in Duval County, Florida.

You are hereby authorized to conduct performance tests on one boiler ("C") at this (Cedar Bay Cogeneration) facility while burning a blend of up to 5 percent TDF (by weight) with coal, or an equivalent of approximately 5 tons per hour at full load. The testing period shall not exceed 30 full power burn days and shall conclude within 60 days from the first day TDF is burned in the boiler. A full power burn day is defined as operation for 24 hours at full load. Test results must include a material balance (fuels, emissions, bottom ash, and fly ash) of the metals in the fuels. All conditions of existing permits related to air pollution emission limits and control equipment remain in force during the test burn.

A performance test shall be conducted during the testing period in order to gather data regarding air pollutant emissions, any operation limitations on burning a blend of up to 5 percent by weight TDF in the boiler, and to determine the metal content in the bottom (bed) and fly ash. The test results as well as an engineering analysis identifying any changes required to the facility in order to sustain continued TDF firing on a permanent basis shall be sent to the Department's Bureau of Air Regulation within 60 days of completion of the tests.

The performance test shall be subject to the following conditions:

1. The permittee shall notify the Duval County Environmental Resource Management Department Environmental Quality Division, the DEP Northeast District, and the Bureau of Air Regulation at least one day prior to burning TDF and 15 days prior to commencement of the performance test. A written test report shall be submitted to these offices within 60 days of completion of the last test run. Notification shall also occur within 5 days, in writing, upon completion of the final test.
2. The maximum feed rate of TDF to the "C" boiler at the Cedar Bay Cogeneration facility shall not exceed 5 tons per hour or 5 percent by weight of the total feed rate, whichever is less.

"More Protection, Less Process"

Printed on recycled paper.

3. The testing series shall include emissions tests for the maximum TDF blend (up to 5 percent) with the boiler operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the capacity allowed by Permit No. PSD-FL-137 (and subsequent revisions). Testing shall be conducted in accordance with the test plan, and incorporated as Attachment "A".
4. Stack emissions related to TDF co-firing shall not exceed any limit within existing permits.
5. Emissions tests shall be conducted and results reported for PM, PM10, Pb, Hg, Be, VOC's and sulfuric acid mist using test methods defined in Specific Condition A.34. of the facility's Title V permit. CEMS data shall be recorded and analyzed for sulfur dioxide, nitrogen oxides, opacity and heat input.
6. Based on the data collected during the test burn, estimate the potential emissions that will occur if the maximum amount of TDF requested is burned in the facility on a permanent basis. For rule applicability determination, calculate any change in emissions (lbs/hr and TPY) for all air pollutants that would result from the firing of a blend of TDF compared with presently permitted scenarios.
7. To provide reasonable assurance that this fuel blend can be burned in compliance with the air regulations, as-burned fuel samples (coal and TDF), bottom ash, and fly ash shall be collected and analyzed for total metals content (selenium, silver, chromium, copper, arsenic, cadmium, zinc, mercury, lead, and beryllium) throughout the test burn of the blended fuel. Weekly composite of daily samples shall be required as well as analyses of a composite sample collected during the particulate matter tests. A one-time, individual sample of each fuel (TDF and coal) shall be required to be analyzed prior to beginning the test burn, in order to ensure the validity of the composite sample.

To provide reasonable assurance that the ash generated from this fuel blend can be disposed of in compliance with the solid and hazardous waste regulations, representative samples of the fly and bottom ash generated as the result of burning coal and TDF shall be sampled and analyzed in accordance with the requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846", Method 3050. The constituents within the metals shall also be analyzed using the Toxic Characteristic Leaching Procedure (TCLP, Method 1311 of SW-846).

- a) A minimum of two composite samples each of fly and bottom ash shall be collected and analyzed at the beginning of the sampling event for organic constituents listed in 40 CFR 261.24 Table 1 using SW-846 test method 1311 (TCLP). If organic constituents are present, then the remainder of the composite samples collected shall be analyzed for organic constituents listed in 40 CFR 261.24 Table 1 using SW-846 test method 1311 (TCLP).
- b) Representative samples shall account for variability in both the fly and bottom ash. The US EPA's protocol entitled "Guidance For Sampling and Analysis of Municipal Waste Combustion Ash For the Toxicity Characteristic" shall be used as guidance for collecting, handling, storing and analyzing a representative sample.
- c) Representative composite samples of fly and bottom ash shall be analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc using SW-846 test method 1311 (TCLP) and 3050 (total metals digestion).
- d) Daily composite samples of the blended fuel, coal mixed with TDF, shall be collected during the ash sampling period and analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc using SW-846 test method 3050. The blended fuel mixture, coal and TDF, samples shall be blended and reduced in size to pass through a #60 mesh screen prior to analysis of specific chemicals.

Mr. Martin Kreft
November 1, 2004
Page 3

8. A material balance of the metals in the fuel, emissions, bottom ash and fly ash shall be performed and reported based on all test/analytical data.
9. Any performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C.
10. Daily records (i.e., mass feed rates of each fuel, heat input, steam production, pressure, temperature, MW, fuel input rates, etc.) of the boiler operations when firing the TDF blend during the tests shall be maintained.
11. The authorized TDF performance test shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C.
12. Performance testing shall cease as soon as possible if the test boiler operations are not in accordance with the conditions within existing permits, or this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
13. This Department action is only to authorize the TDF blend performance test. Any firing of tire derived fuel beyond the 30 full-power burn days (or 60 calendar days) of testing approved to conduct such tests will be deemed a violation of permit No. PSD-FL-137.
14. Unless otherwise specified herein, the test protocol submitted by the applicant, and received by FDEP on October 25, 2004, including the sampling and analysis methods of fuel and ash, is acceptable and incorporated herein as Attachment "A".

This letter must be attached to permit No. PSD-FL-137 and shall become a part of the permit.

Sincerely,



Michael G. Cooke, Director
Division of Air Resource
Management

Mr. Martin Kreft
November 1, 2004
Page 4

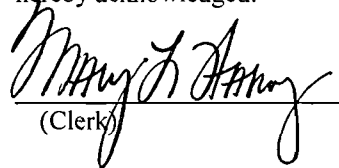
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice of Intent to Issue Air Construction Permit and the Draft Air Construction Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12/9/04 to the person(s) listed:

Martin Kreft, Cedar Bay *
Jeff Walker, Cedar Bay
Gregg Worley, EPA
John Bunyak, NPS
Chris Kirts, NED
Steve Pace, Duval County ERMD
Ken Kosky, Golder
Hamilton S. Oven, DEP-Siting

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)

12/9/04
(Date)

CEDAR BAY COGENERATING PLANT TIRE DERIVED FUEL TEST BURN PROTOCOL

PURPOSE

Cedar Bay's Circulating Fluidized Bed boilers represent one of the newer systems designed to minimize environmental impact from use of a variety of solid fuels, including Tire-Derived Fuel (TDF). High turbulence and uniform heat distribution allow fluidized beds to operate at lower temperatures to minimize NO_x formation. Ammonium Hydroxide is also used to supplement NO_x reduction. Limestone is used as the circulating bed media providing efficient Sox control through integral mixing with combustion gases. Baghouses provide efficient particulate removal.

Cedar Bay proposes to perform a performance test burn of tire-derived fuel in one boiler (Boiler C) in order to evaluate its use as a supplemental fuel. The 30-day test burn of tire-derived fuel is designed to ascertain whether the circulating fluidized bed boiler can burn the TDF as supplemental fuel without exceeding permitted limitations on emissions, fuel usage or other environmental conditions and without causing any operational conditions which would affect reliable operation. This plan is intended to be used for submission to FDEP and RESD and as a guide for the plant to complete the performance test burn.

TDF DESCRIPTION

Tire-Derived Fuel (TDF) refers to the use of processed scrap tires as a substitute for fossil fuel. TDF is a hydrocarbon-based material derived from oil and gas. The TDF has a heat content in the range of 14,000 – 15,500 Btu/pound as compared to Cedar Bay's coal heat content of 11,500 – 12,500 Btu/pound. With a lower moisture content than coal, there is a higher energy utilization efficiency and TDF's higher volatile-to-fixed carbon ratio provides rapid and complete combustion.

TDF COMBUSTION PROCESS & EQUIPMENT

The TDF will be delivered to Cedar Bay in trucks. The TDF will be stored in the existing limestone storage area. Cedar Bay will utilize a temporary conveyor equipped with a dedicated hopper and metering device to feed the TDF on a conveyor after the coal crusher to enable the feed of the desired ratio of TDF to coal in Boiler C's coal silos.

The TDF metering unit is approximately 20' long, 8' wide and 11' high. The metering bin has sloped sides that angle down, with two screw augers in the bottom of the unit that are variable speed controlled. The system is designed to discharge onto a belt transfer conveyor. The system instrumentation is in a waterproof enclosure that will enable the plant to interlock the unit with the existing fuel handling system.

The TDF will provide less than 5% of the heat input to C boiler when the TDF feed rate is 5 tons/hr and the boiler is at full load.

SCOPE OF TEST BURN

Operational Feasibility: In order to confirm that co-firing of TDF is feasible without adverse impact to operations the following will be monitored using the dedicated operational performance monitoring software:

- Boiler Operations – facility personnel will monitor boiler performance during the 30-day test burn to determine the impact of TDF combustion on performance and operations.

Key parameters that will be continuously monitored are as follows:

1. Coal flow (KLBS/HR)
 2. Coal Master Demand (%)
 3. Main Steam Flow (KLBS/HR)
 4. Main Steam Temperature (DEG F)
 5. Main Steam Pressure (PSIG)
 6. Reheat Flow (KLBS/HR)
 7. Reheat Temperature (DEG F)
 8. Reheat Pressure (PSIG)
 9. Reheat Attenuator Water Flow (KLBS/HR)
 10. Primary Air Grid Nozzle Flow (KLBS/HR)
 11. Primary Air Temperature (DEG F)
 12. Secondary Air Flow (KLBS/HR)
 13. Secondary Temperature (DEG F)
 14. Bed Temperature (DEG F)
 15. Cyclone Outlet Temperature (DEG F)
 16. Combustor Lower Temperature (DEG F)
 17. Combustor Middle Temperature (DEG F)
 18. Combustor Upper Temperature (DEG F)
 19. ReheatII Outlet Gas Temperature (DEG F)
 20. Economizer Inlet Gas Temperature (DEG F)
 21. Economizer Outlet Gas Temperature (DEG F)
 22. Primary Air Air Heater Cold End Temperature (DEG F)
 23. Secondary Air Air Heater Cold End Temperature (DEG F)
- Ash Handling/Air Pollution Control Equipment – facility personnel will monitor the performance of the ash transport system and emission control equipment to ensure proper operation. Parameters that will be continuously monitored:
 1. Baghouse DP “Average” (PSIG)
 2. Baghouse Inlet Temperature (DEG F)
 3. Opacity (%)
 4. Ammonia Flow (ACFM)

Environmental Compliance: facility personnel will monitor the applicable parameters during the test burn to ensure compliance with all permit conditions:

- The amount of TDF burned will be monitored and recorded
- CEM Monitoring – the CEM system will be used throughout the 30-day test period to confirm compliance with CO, NOx, SOx, Opacity and heat input limitations.
- Limestone Flow (KLBS/HR)
- Stack Testing for Particulate Matter, Particulate Matter less than 10 microns, Lead, Mercury, and Beryllium, Sulfuric Acid Mist and Volatile Organics will be completed during the 30-day test burn to confirm compliance with these limitations. The tests will be conducted by a qualified test firm.

The following test methods and procedures will be used during the test burn:

Purpose / Substance	Test Method
Selection of sample site and sample traverse	EPA Method 1
Determination of stack gas flow	EPA Method 2
Gas analysis for calculation of percent O ₂ and CO ₂	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf)	EPA Method 4
PM	EPA Method 5, 17, or 29
PM ₁₀	EPA Method 201 or 201A
VE	EPA Method 9
Pb	EPA Method 12 or 29
Hg	EPA Method 101A or 29
Be	EPA Method 104 or 29
Sulfuric Acid Mist	EPA Method 8
VOCs	EPA Method 18 or 25

TESTING PROCEDURE

The plant should be operating in a steady state while maintaining as close to the following parameters as possible:

Main steam temp 1000 deg F +/- 10 deg F
 Reheat steam temp 1000 deg F +/- 10 deg F
 Main steam pressure 2410 +/- 100 psia
 Boiler Blowdown in normal operation
 Condenser level in auto
 Deaerator level in auto
 Steam drum level in auto
 Plant in stable condition (no plugged fuel feeders etc) with no major maintenance occurring
 Bottom ash screw coolers in steady state operation.

The outside emission testing company should have their equipment in place and ready to collect data from the exit ductwork on Boiler C.

At the point the silo level reaches 0% indication on the DCS or the fuel level reaches the pant leg of the silo the blended test fuel can be fed to the fuel silo. Past experience indicates that it will take about 3 hours for the test burn material to reach the boiler.

Normal automatic operations should be maintained. Boiler operation will be at steady state full load operation at least one hour prior to commencing stack test achieving a minimum 704 Klbs/hr steam flow and 956.7 lbs/mmBtu heat input during emission testing.

Fuel Sampling and Analytical Methodology

One (1) as-fired fuel sample (blend of coal and TDF) will be collected each day from the coal conveyor belt prior to bunkering into the silo and composited into a weekly sample for analysis. This sampling schedule will be followed throughout the blended test burn period. The weekly composite sample will be analyzed for the constituents listed in the following "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

A. Arsenic	Method 7060	F. Lead	Method 7421
B. Beryllium	Method 6010	G. Mercury	Method 7471
C. Cadmium	Method 6010	H. Selenium	Method 7740
D. Chromium	Method 6010	I. Silver	Method 6010.
E. Copper	Method 6010	J. Zinc	Method 6010

Daily TDF/coal samples will be collected for proximate analyses. (% moisture,% ash,% volatile,% fixed carbon, % sulfur and BTU/lb determination

Ash Sampling and Analytical Methodology

Ash sample collection should be conducted in conjunction with the fuel samples for metals analysis. Flyash will be collected below the bottom dump gates of the flyash separator while the bottom ash will be off the sample port on the drag chain.

One (1) sample of fly ash and one (1) sample of bed ash will be collected each day at the sample points and composited into weekly bed and fly ash samples for analysis. The weekly composite sample will be analyzed for the constituents listed in the "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

F. Arsenic	Method 7060	F. Lead	Method 7421
G. Beryllium	Method 6010	G. Mercury	Method 7471
H. Cadmium	Method 6010	H. Selenium	Method 7740
I. Chromium	Method 6010	I. Silver	Method 6010.
J. Copper	Method 6010	J. Zinc	Method 6010

The constituents in the "Metals Table" will be also analyzed using the Toxic Characteristic Leaching Procedure (TCLP, Method 1311 of SW-846).

DATA COLLECTION

The plant data collection system has been programmed to collect pertinent data points.

CALCULATIONS AND REPORT

To be provided at the conclusion of the test burn

Best Available Copy

<p>SENDER: COMPLETE THIS SECTION</p> <ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. <p>1. Article Addressed to: Mr. Martin Kreft General Manager Cedar Bay Generating Co., L.P. 9640 Eastport Road Jacksonville, Florida 32218</p>	<p style="text-align: right;">POST OFFICE OF DELIVERY</p> <p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee <i>[Handwritten Signature]</i></p> <p>B. Received by (Printed Name) <input type="checkbox"/> Agent <input type="checkbox"/> Addressee <i>Shelly Arnold</i></p> <p>C. Date of Delivery <i>12/14/04</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) 7000 1670 0013 3110 2004</p>	



PS Form 3811, Aug 2003 Domestic Return Receipt 102595-02-M-1540

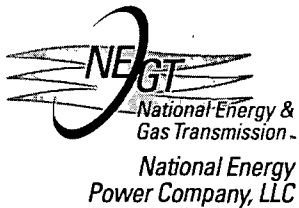
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Sent to
Mr. Martin Kreft
General Manager
 Street, Apt. No., or PO Box No.
Cedar Bay Generating Co., L.P.
 City, State, ZIP+4®
9640 Eastport Road
Jacksonville, Florida 32218

PS Form 3800, May 2000 See Reverse for Instructions



RECEIVED

DEC 07 2004

Cedar Bay Generating Co., L.P.
9640 Eastport Road
Jacksonville, FL 32218

904.751.4000
Fax: 904.751.7320
www.negt.com

December 6, 2004

BUREAU OF AIR REGULATION

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

Re: Cedar Bay Public Notice of Intent to Issue Air Construction Permit

Dear Mr. Halpin:

Pursuant to the instructions in the Department's letter dated November 1, 2004, Cedar Bay submits the Affidavit of Publication for the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" for Cedar Bay Generating Company's proposed test burn of tire derived fuel. The notice was published in the legal ad section of the Florida Times Union on November 22, 2004.

If there are any questions or if any additional information is needed, please do not hesitate to contact me via phone or e-mail.

Sincerely,

Jeffrey A. Walker
Environmental Manager, Cedar Bay Plant

Cc: Martin Kreft, Cedar Bay
Tom Fromm, Bethesda

THE FLORIDIA TIMES-UNION Jacksonville, Fl
Affidavit of Publication

Florida Times-Union

CEDAR BAY GENERATING CO.
PO BOX 26324
JACKSONVILLE FL 32236

REFERENCE: 0181153
K051500 Public Notice

State of Florida
County of Duval

Before the undersigned authority personally appeared Kimalete Frazier who on oath says she 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: 11/22

FILED ON: 11/29/04

Name: Kimalete Frazier Title: Legal Advertising Representative
In testimony whereof, I have hereunto set my hand and affixed my of seal, the day and year aforesaid.

NOTARY:

Twill Shipp



TWILLA SHIPP
Notary Public, State of Florida
Commission Expires May 13, 2006
Commission No. 00117248

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No. 0310337-008-AC (PA 88-24)
Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility
Duval County

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit for Cedar Bay Cogeneration Facility, located at 9640 Eastport Road, Jacksonville, Duval County. The permit allows for a test burn, co-firing a 5% blend of TDF (tire derived fuel) in Boiler "C" for up to 60 calendar days or 30 full power burn days (whichever comes first). A full power burn day is defined as operation for 24 hours at full load. This is an existing facility, which combusts primarily coal. A Determination of Best Available Control Technology (BACT) was not required, since there will be no significant increases in criteria pollutants as defined by Table 62-212.400-2 of the Florida Administrative Code. The applicant's mailing address is: P.O. Box 26324, Jacksonville, FL 32226-6324.

An air quality impact analysis was not required. 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 concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. 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 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 28-105.205 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:

Florida Department of
Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: (850) 488-1344
Fax: (850) 922-6979

Florida Department of
Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256
Telephone: (904) 807-3300

The complete project file includes the application, Draft permit, and the information submitted by the Responsible Official, exclusive of confidential records under Section 403.111, F.S. Interested persons may review specific details of this project by contacting the Administrator, North Permitting Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.



RECEIVED

OCT 25 2004

BUREAU OF AIR REGULATION

Cedar Bay Generating Co.,
L.P.
9640 Eastport Road
Jacksonville, FL 32218

904.751.4000
Fax: 904.751.7320
www.negt.com

October 22, 2004

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Ms. Trina Vielhauer, Chief, Bureau of Air Regulation

RE: Cedar Bay Cogeneration Facility Facility ID. No. 0310337
PSD-FL-137 and DEP File No. PA 88-24

0310337-008-AC

Dear Ms. Vielhauer:

Cedar Bay Generating Company, L.P. (Cedar Bay) is seeking approval to test burn tire derived fuel (TDF) in one of the CFB boilers (Boiler C) at the Cedar Bay Cogeneration Plant. A 30-day test burn is desired to determine the environmental and operational performance of co-firing about 5 percent TDF (feed rate of 5 tons/hr) with 95 percent coal. The actual test burn may be longer than 30-days to accommodate time for the various tests as well as operational considerations. Duration of 60 days should be sufficient to characterize both the performance and environmental conditions of co-firing TDF with coal. Cedar Bay desires to initiate testing on about January 10, 2005. A test burn protocol is attached.

Table 1 presents a comparison of the chemical properties of the coal used at Cedar Bay and TDF as well as emission characteristics between coal and TDF. The characteristics between coal and TDF indicate that ash is substantially lower than coal, while sulfur content of TDF is slightly higher than coal. The heat content of TDF is higher than coal resulting in less TDF for the same heat input. The higher volatile content of TDF suggests that complete combustion can be accomplished. The only air pollutant that would have the potential to increase during a test burn is sulfur dioxide since TDF has slightly higher sulfur content than

October 22, 2004

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Please call Jeff Walker, Cedar Bays Environmental Manager (904) 696-1547 or Ken Kosky, P.E. of Golder Associates (352) 336-5600 for any technical questions regarding this request. The Department's consideration in this matter is appreciated.

Sincerely,



Martin Kreft

General Manager

Cc: Hamilton S. Oven, P.E., FDEP Siting Coordination Office

M. Halpin
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Table 1. COMPARATIVE CHEMICAL AND EMISSIONS CHARACTERISTICS FOR COAL AND TDF

Characteristic	Cedar Bay Coal	TDF	Combination
<u>Proximate Analysis (% as received)</u>			
	2003 annual average		
Moisture	6.49	0.62	6.20
Ash	10.89	4.78	10.59
Volatile	33.21	66.64	34.87
Fixed Carbon	49.35	27.96	48.29
<u>Ultimate Analysis (% as received)</u>			
Carbon	68.85	83.27	69.56
Hydrogen	4.35	7.09	4.49
Nitrogen	1.32	0.24	1.27
Sulfur	0.96	1.83	1.00
Ash	11.14	4.78	10.83
Moisture	7.05	0.62	6.73
Oxygen	6.41	2.17	6.20
CFB-C Performance			
Heat Content (Btu/lb)	12,000	14,700	12,135
Mass Percentage	95.05%	4.95%	100.00%
Heat Input by Fuel (tons/hr)	41.63	2.17	43.80
Percentage by Heat Input	94%	6%	100%
Heat Input by Fuel (MMBtu/hr)	999.2	63.8	1,063.0
Unit heat Input (MMBtu/hr) - permitted	1,063		
Sulfur Dioxide Emissions			
Sulfur dioxide (uncontrolled; lb/hr with TDF)	1,598.8	158.8	1,757.6
Sulfur dioxide Uncontrolled Emission Rate (lb/MMBtu)	1.6	2.5	1.7
Sulfur dioxide (uncontrolled; lb/hr coal only)	1,700.8	0.0	1,700.8
Difference (lb/hr)			56.8
Sulfur dioxide Emission Rate (lb/MMBtu)	0.2	0.2	0.2
Removal Efficiency	87.50%	91.97%	87.90%
Theoretical Increase (lb/hr)			6.86
Theoretical Increase (tons/test)			2.47

CEDAR BAY COGENERATING PLANT TIRE DERIVED FUEL TEST BURN PROTOCOL

PURPOSE

Cedar Bay's Circulating Fluidized Bed boilers represent one of the newer systems designed to minimize environmental impact from use of a variety of solid fuels, including Tire-Derived Fuel (TDF). High turbulence and uniform heat distribution allow fluidized beds to operate at lower temperatures to minimize NO_x formation. Ammonium Hydroxide is also used to supplement NO_x reduction. Limestone is used as the circulating bed media providing efficient Sox control through integral mixing with combustion gases. Baghouses provide efficient particulate removal.

Cedar Bay proposes to perform a performance test burn of tire-derived fuel in one boiler (Boiler C) in order to evaluate its use as a supplemental fuel. The 30-day test burn of tire-derived fuel is designed to ascertain whether the circulating fluidized bed boiler can burn the TDF as supplemental fuel without exceeding permitted limitations on emissions, fuel usage or other environmental conditions and without causing any operational conditions which would affect reliable operation. This plan is intended to be used for submission to FDEP and RESD and as a guide for the plant to complete the performance test burn.

TDF DESCRIPTION

Tire-Derived Fuel (TDF) refers to the use of processed scrap tires as a substitute for fossil fuel. TDF is a hydrocarbon-based material derived from oil and gas. The TDF has a heat content in the range of 14,000 – 15,500 Btu/pound as compared to Cedar Bay's coal heat content of 11,500 – 12,500 Btu/pound. With a lower moisture content than coal, there is a higher energy utilization efficiency and TDF's higher volatile-to-fixed carbon ratio provides rapid and complete combustion.

TDF COMBUSTION PROCESS & EQUIPMENT

The TDF will be delivered to Cedar Bay in trucks. The TDF will be stored in the existing limestone storage area. Cedar Bay will utilize a temporary conveyor equipped with a dedicated hopper and metering device to feed the TDF on a conveyor after the coal crusher to enable the feed of the desired ratio of TDF to coal in Boiler C's coal silos.

The TDF metering unit is approximately 20' long, 8' wide and 11' high. The metering bin has sloped sides that angle down, with two screw augers in the bottom of the unit that are variable speed controlled. The system is designed to discharge onto a belt transfer conveyor. The system instrumentation is in a waterproof enclosure that will enable the plant to interlock the unit with the existing fuel handling system.

The TDF will provide less than 5% of the heat input to C boiler when the TDF feed rate is 5 tons/hr and the boiler is at full load.

SCOPE OF TEST BURN

Operational Feasibility: In order to confirm that co-firing of TDF is feasible without adverse impact to operations the following will be monitored using the dedicated operational performance monitoring software:

- Boiler Operations – facility personnel will monitor boiler performance during the 30-day test burn to determine the impact of TDF combustion on performance and operations. Key parameters that will be continuously monitored are as follows:
 1. Coal flow (KLBS/HR)
 2. Coal Master Demand (%)
 3. Main Steam Flow (KLBS/HR)
 4. Main Steam Temperature (DEG F)
 5. Main Steam Pressure (PSIG)
 6. Reheat Flow (KLBS/HR)
 7. Reheat Temperature (DEG F)
 8. Reheat Pressure (PSIG)
 9. Reheat Attenuator Water Flow (KLBS/HR)
 10. Primary Air Grid Nozzle Flow (KLBS/HR)
 11. Primary Air Temperature (DEG F)
 12. Secondary Air Flow (KLBS/HR)
 13. Secondary Temperature (DEG F)
 14. Bed Temperature (DEG F)
 15. Cyclone Outlet Temperature (DEG F)
 16. Combustor Lower Temperature (DEG F)
 17. Combustor Middle Temperature (DEG F)
 18. Combustor Upper Temperature (DEG F)
 19. ReheatII Outlet Gas Temperature (DEG F)
 20. Economizer Inlet Gas Temperature (DEG F)
 21. Economizer Outlet Gas Temperature (DEG F)
 22. Primary Air Air Heater Cold End Temperature (DEG F)
 23. Secondary Air Air Heater Cold End Temperature (DEG F)

- Ash Handling/Air Pollution Control Equipment – facility personnel will monitor the performance of the ash transport system and emission control equipment to ensure proper operation. Parameters that will be continuously monitored:
 1. Baghouse DP “Average” (PSIG)
 2. Baghouse Inlet Temperature (DEG F)
 3. Opacity (%)
 4. Ammonia Flow (ACFM)

Environmental Compliance: facility personnel will monitor the applicable parameters during the test burn to ensure compliance with all permit conditions:

- The amount of TDF burned will be monitored and recorded
- CEM Monitoring – the CEM system will be used throughout the 30-day test period to confirm compliance with CO, NO_x, SO_x, Opacity and heat input limitations.
- Limestone Flow (KLBS/HR)
- Stack Testing for Particulate Matter, Particulate Matter less than 10 microns, Lead, Mercury, and Beryllium, Sulfuric Acid Mist and Volatile Organics will be completed during the 30-day test burn to confirm compliance with these limitations. The tests will be conducted by a qualified test firm.

The following test methods and procedures will be used during the test burn:

Purpose / Substance	Test Method
Selection of sample site and sample traverse	EPA Method 1
Determination of stack gas flow	EPA Method 2
Gas analysis for calculation of percent O ₂ and CO ₂	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf)	EPA Method 4
PM	EPA Method 5, 17, or 29
PM ₁₀	EPA Method 201 or 201A
VE	EPA Method 9
Pb	EPA Method 12 or 29
Hg	EPA Method 101A or 29
Be	EPA Method 104 or 29
Sulfuric Acid Mist	EPA Method 8
VOCs	EPA Method 18 or 25

TESTING PROCEDURE

The plant should be operating in a steady state while maintaining as close to the following parameters as possible:

Main steam temp 1000 deg F +/- 10 deg F
 Reheat steam temp 1000 deg F +/- 10 deg F
 Main steam pressure 2410 +/- 100 psia
 Boiler Blowdown in normal operation
 Condenser level in auto
 Deaerator level in auto
 Steam drum level in auto
 Plant in stable condition (no plugged fuel feeders etc) with no major maintenance occurring
 Bottom ash screw coolers in steady state operation.

The outside emission testing company should have their equipment in place and ready to collect data from the exit ductwork on Boiler C.

At the point the silo level reaches 0% indication on the DCS or the fuel level reaches the pant leg of the silo the blended test fuel can be fed to the fuel silo. Past experience indicates that it will take about 3 hours for the test burn material to reach the boiler.

Normal automatic operations should be maintained. Boiler operation will be at steady state full load operation at least one hour prior to commencing stack test achieving a minimum 704 Klbs/hr steam flow and 956.7 lbs/mmBtu heat input during emission testing.

Fuel Sampling and Analytical Methodology

One (1) as-fired fuel sample (blend of coal and TDF) will be collected each day from the coal conveyor belt prior to bunkering into the silo and composited into a weekly sample for analysis. This sampling schedule will be followed throughout the blended test burn period. The weekly composite sample will be analyzed for the constituents listed in the following "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

A. Arsenic	Method 7060	F. Lead	Method 7421
B. Beryllium	Method 6010	G. Mercury	Method 7471
C. Cadmium	Method 6010	H. Selenium	Method 7740
D. Chromium	Method 6010	I Silver	Method 6010.
E. Copper	Method 6010	J. Zinc	Method 6010

Daily TDF/coal samples will be collected for proximate analyses. (% moisture,% ash,% volatile,% fixed carbon, % sulfur and BTU/lb determination

Ash Sampling and Analytical Methodology

Ash sample collection should be conducted in conjunction with the fuel samples for metals analysis. Flyash will be collected below the bottom dump gates of the flyash separator while the bottom ash will be off the sample port on the drag chain.

One (1) sample of fly ash and one (1) sample of bed ash will be collected each day at the sample points and composited into weekly bed and fly ash samples for analysis. The weekly composite sample will be analyzed for the constituents listed in the "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

F. Arsenic	Method 7060	F. Lead	Method 7421
G. Beryllium	Method 6010	G. Mercury	Method 7471
H. Cadmium	Method 6010	H. Selenium	Method 7740
I. Chromium	Method 6010	I Silver	Method 6010.
J. Copper	Method 6010	J. Zinc	Method 6010

The constituents in the "Metals Table" will be also analyzed using the Toxic Characteristic Leaching Procedure (TCLP, Method 1311 of SW-846).

DATA COLLECTION

The plant data collection system has been programmed to collect pertinent data points.

CALCULATIONS AND REPORT

To be provided at the conclusion of the test burn

THE FLORIDIA TIMES-UNION Jacksonville, Fl
Affidavit of Publication

Florida Times-Union

CEDAR BAY GENERATING CO.
PO BOX 26324
JACKSONVILLE FL 32236

REFERENCE: 0181153
R051500 Public Notice

State of Florida
County of Duval

Before the undersigned authority personally appeared Kimalete Frazier who on oath says she 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: 11/22

FILED ON: 11/29/04

Name: Kimalete Frazier Title: Legal Advertising Representative
In testimony whereof, I have hereunto set my hand and affixed my of seal, the day and year aforesaid.

NOTARY:



TWILLA SHIPP
Notary Public, State of Florida
My comm. expires May 13, 2006
Comm. No. DU 117248

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No. 0310337-008-AC (PA 88-24)
Cedar Bay Generating Company, L.P.
Cedar Bay Cogeneration Facility
Duval County

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit for Cedar Bay Cogeneration Facility, located at 9640 Eastport Road, Jacksonville, Duval County. The permit allows for a test burn, co-firing a 5% blend of TDF (tire derived fuel) in Boiler "C" for up to 60 calendar days or 30 full power burn days (whichever comes first). A full power burn day is defined as operation for 24 hours at full load. This is an existing facility, which combusts primarily coal. A Determination of Best Available Control Technology (BACT) was not required, since there will be no significant increases in criteria pollutants as defined by Table 62-212.400-2 of the Florida Administrative Code. The applicant's mailing address is: P.O. Box 26324, Jacksonville, FL 32226-6324.

An air quality impact analysis was not required. 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 concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. 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 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 28-105.205 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:

Florida Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: (850) 488-1344
Fax: (850) 922-6979

Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256
Telephone: (904) 807-3300

The complete project file includes the application, Draft permit, and the information submitted by the Responsible Official, exclusive of confidential records under Section 403.111, F.S. Interested persons may review specific details of this project by contacting the Administrator, North Permitting Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

Best Available Copy

<p>SENDER: COMPLETE THIS SECTION</p> <ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. <p>1. Article Addressed to: Mr. Martin Kreft General Manager Cedar Bay Generating Co., L.P. 9640 Eastport Road Jacksonville, Florida 32218</p>	<p align="right">IN ON DELIVERY</p> <p>A. Signature </p> <p><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery Sherry Arnold 12/14/04</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p align="center"> </p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number 7000 1670 0013 3110 2004 (Transfer from service label)</p>	

PS Form 3811, Aug 2004

Domestic Return Receipt

102595-02-M-1540

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)											
OFFICIAL USE											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Postage</td> <td style="width: 20%;">\$</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Total Postage & Fees</td> <td>\$</td> </tr> </table>	Postage	\$	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		Total Postage & Fees	\$	Postmark Here
Postage	\$										
Certified Fee											
Return Receipt Fee (Endorsement Required)											
Restricted Delivery Fee (Endorsement Required)											
Total Postage & Fees	\$										
Sent To Mr. Martin Kreft General Manager Street, Apt. No., or PO Box No. Cedar Bay Generating Co., L.P. 9640 Eastport Road City, State, ZIP+4 Jacksonville, Florida 32218											
PS Form 3800, May 2000 See Reverse for Instructions											

7000 1670 0013 3110 2004
 0002 017E FT00 0270 0004



RECEIVED

OCT 25 2004

BUREAU OF AIR REGULATION

Cedar Bay Generating Co.,
L.P.
9640 Eastport Road
Jacksonville, FL 32218

904.751.4000
Fax: 904.751.7320
www.negt.com

October 22, 2004

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Ms. Trina Vielhauer, Chief, Bureau of Air Regulation

RE: Cedar Bay Cogeneration Facility Facility ID. No. 0310337
PSD-FL-137 and DEP File No. PA 88-24

Dear Ms. Vielhauer:

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Tire-Derived Fuel (TDF) refers to the use of processed scrap tires as a substitute for fossil fuel. TDF is a hydrocarbon-based material derived from oil and gas. The TDF has a heat content in the range of 14,000 – 15,500 Btu/pound as compared to Cedar Bay's coal heat content of 11,500 – 12,500 Btu/pound. With a lower moisture content than coal, there is a higher energy utilization efficiency and TDF's higher volatile-to-fixed carbon ratio provides rapid and complete combustion.

TDF COMBUSTION PROCESS & EQUIPMENT

The TDF will be delivered to Cedar Bay in trucks. The TDF will be stored in the existing limestone storage area. Cedar Bay will utilize a temporary conveyor equipped with a dedicated hopper and metering device to feed the TDF on a conveyor after the coal crusher to enable the feed of the desired ratio of TDF to coal in Boiler C's coal silos.

The TDF metering unit is approximately 20' long, 8' wide and 11' high. The metering bin has sloped sides that angle down., with two screw augers in the bottom of the unit that are variable speed controlled. The system is designed to discharge onto a belt transfer conveyor. The system instrumentation is in a waterproof enclosure that will enable the plant to interlock the unit with the existing fuel handling system.

The TDF will provide less than 5% of the heat input to C boiler when the TDF feed rate is 5 tons/hr and the boiler is at full load.

SCOPE OF TEST BURN

Operational Feasibility: In order to confirm that co-firing of TDF is feasible without adverse impact to operations the following will be monitored using the dedicated operational performance monitoring software:

- Boiler Operations – facility personnel will monitor boiler performance during the 30-day test burn to determine the impact of TDF combustion on performance and operations. Key parameters that will be continuously monitored are as follows:
 1. Coal flow (KLBS/HR)
 2. Coal Master Demand (%)
 3. Main Steam Flow (KLBS/HR)
 4. Main Steam Temperature (DEG F)
 5. Main Steam Pressure (PSIG)
 6. Reheat Flow (KLBS/HR)
 7. Reheat Temperature (DEG F)
 8. Reheat Pressure (PSIG)
 9. Reheat Attenuator Water Flow (KLBS/HR)
 10. Primary Air Grid Nozzle Flow (KLBS/HR)
 11. Primary Air Temperature (DEG F)
 12. Secondary Air Flow (KLBS/HR)
 13. Secondary Temperature (DEG F)
 14. Bed Temperature (DEG F)
 15. Cyclone Outlet Temperature (DEG F)
 16. Combustor Lower Temperature (DEG F)
 17. Combustor Middle Temperature (DEG F)
 18. Combustor Upper Temperature (DEG F)
 19. ReheatII Outlet Gas Temperature (DEG F)
 20. Economizer Inlet Gas Temperature (DEG F)
 21. Economizer Outlet Gas Temperature (DEG F)
 22. Primary Air Air Heater Cold End Temperature (DEG F)
 23. Secondary Air Air Heater Cold End Temperature (DEG F)

- Ash Handling/Air Pollution Control Equipment – facility personnel will monitor the performance of the ash transport system and emission control equipment to ensure proper operation. Parameters that will be continuously monitored:
 1. Baghouse DP “Average” (PSIG)
 2. Baghouse Inlet Temperature (DEG F)
 3. Opacity (%)
 4. Ammonia Flow (ACFM)

Environmental Compliance: facility personnel will monitor the applicable parameters during the test burn to ensure compliance with all permit conditions:

- The amount of TDF burned will be monitored and recorded
- CEM Monitoring – the CEM system will be used throughout the 30-day test period to confirm compliance with CO, NOx, SOx, Opacity and heat input limitations.
- Limestone Flow (KLBS/HR)
- Stack Testing for Particulate Matter, Particulate Matter less than 10 microns, Lead, Mercury, and Beryllium, Sulfuric Acid Mist and Volatile Organics will be completed during the 30-day test burn to confirm compliance with these limitations. The tests will be conducted by a qualified test firm.

The following test methods and procedures will be used during the test burn:

Purpose / Substance	Test Method
Selection of sample site and sample traverse	EPA Method 1
Determination of stack gas flow	EPA Method 2
Gas analysis for calculation of percent O ₂ and CO ₂	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf)	EPA Method 4
PM	EPA Method 5, 17, or 29
PM ₁₀	EPA Method 201 or 201A
VE	EPA Method 9
Pb	EPA Method 12 or 29
Hg	EPA Method 101A or 29
Be	EPA Method 104 or 29
Sulfuric Acid Mist	EPA Method 8
VOCs	EPA Method 18 or 25

TESTING PROCEDURE

The plant should be operating in a steady state while maintaining as close to the following parameters as possible:

Main steam temp 1000 deg F +/- 10 deg F
 Reheat steam temp 1000 deg F +/- 10 deg F
 Main steam pressure 2410 +/- 100 psia
 Boiler Blowdown in normal operation
 Condenser level in auto
 Deaerator level in auto
 Steam drum level in auto
 Plant in stable condition (no plugged fuel feeders etc) with no major maintenance occurring
 Bottom ash screw coolers in steady state operation.

The outside emission testing company should have their equipment in place and ready to collect data from the exit ductwork on Boiler C.

At the point the silo level reaches 0% indication on the DCS or the fuel level reaches the pant leg of the silo the blended test fuel can be fed to the fuel silo. Past experience indicates that it will take about 3 hours for the test burn material to reach the boiler.

Normal automatic operations should be maintained. Boiler operation will be at steady state full load operation at least one hour prior to commencing stack test achieving a minimum 704 Klbs/hr steam flow and 956.7 lbs/mmBtu heat input during emission testing.

Fuel Sampling and Analytical Methodology

One (1) as-fired fuel sample (blend of coal and TDF) will be collected each day from the coal conveyor belt prior to bunkering into the silo and composited into a weekly sample for analysis. This sampling schedule will be followed throughout the blended test burn period. The weekly composite sample will be analyzed for the constituents listed in the following "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

A. Arsenic	Method 7060	F. Lead	Method 7421
B. Beryllium	Method 6010	G. Mercury	Method 7471
C. Cadmium	Method 6010	H. Selenium	Method 7740
D. Chromium	Method 6010	I Silver	Method 6010.
E. Copper	Method 6010	J. Zinc	Method 6010

Daily TDF/coal samples will be collected for proximate analyses. (% moisture,% ash,% volatile,% fixed carbon, % sulfur and BTU/lb determination

Ash Sampling and Analytical Methodology

Ash sample collection should be conducted in conjunction with the fuel samples for metals analysis. Flyash will be collected below the bottom dump gates of the flyash separator while the bottom ash will be off the sample port on the drag chain.

One (1) sample of fly ash and one (1) sample of bed ash will be collected each day at the sample points and composited into weekly bed and fly ash samples for analysis. The weekly composite sample will be analyzed for the constituents listed in the "Metals Table" below.

Metals Table

Fuel samples will be analyzed using the SW-846 Method 3050 (Metals Digestion Procedure).

F. Arsenic	Method 7060	F. Lead	Method 7421
G. Beryllium	Method 6010	G. Mercury	Method 7471
H. Cadmium	Method 6010	H. Selenium	Method 7740
I. Chromium	Method 6010	I Silver	Method 6010.
J. Copper	Method 6010	J. Zinc	Method 6010

The constituents in the "Metals Table" will be also analyzed using the Toxic Characteristic Leaching Procedure (TCLP, Method 1311 of SW-846).

DATA COLLECTION

The plant data collection system has been programmed to collect pertinent data points.

CALCULATIONS AND REPORT

To be provided at the conclusion of the test burn