

Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Jennifer Carroll Lt. Governor

Herschel T. Vinyard Jr. Secretary

Sent by Electronic Mail – Received Receipt Requested

mhammond@swa.org
Mark Hammond, Executive Director
Solid Waste Authority of Palm Beach County
7501 North Jog Road
West Palm Beach, FL 33412

Re: DEP File No. 0990234-023-AC (PSD-FL-413A)

Palm Beach Renewable Energy Park

Palm Beach Renewable Energy Facility No. 2

Dear Mr. Hammond:

On October 31, 2011, you submitted an application for an air construction permit modification. The purpose of the modification is to:

- Change the designations for the three new municipal waste combustors of the Palm Beach Renewable Energy Facility No. 2 from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 to distinguish the three new municipal waste combustors from the two existing municipal waste combustors (Nos. 1 and 2) currently in operation at the Palm Beach Renewable Energy Park;
- Correct a federal rule citation on page 8 of Section 3.A. pertaining to Specific Condition 3. The second sentence currently reads "In accordance with 40 CFR 60.130, the storage of aqueous ammonia or urea shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68." The federal rule should be 40 CFR 68.130 not 40 CFR 60.130.
- Increase the size of the two emergency fire pump engines and the emergency generator;
- Increase the size of the fuel oil storage tank for the emergency generator; and,
- Remove the language restricting the duration of each emergency equipment maintenance and testing event to 30 minutes or less in any hour, and that the maintenance and testing event cannot occur concurrently with maintenance and testing of other emergency equipment.

Enclosed are the following documents: Written Notice of Intent to Issue Air Permit; Public Notice of Intent to Issue Air Permit; Technical Evaluation and Preliminary Determination; and Draft Permit.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the project engineer, David Read at 850/717-9075 or david.read@dep.state.fl.us.

Sincerely,

Jeffery F. Koerner, Program Administrator

Office of Permitting and Compliance
Division of Air Resource Management

(Date)

Enclosures JK/aal/dlr

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an Application for Air Permit by:

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, FL 33412

Authorized Representative:

Mark Hammond, Executive Director

Air Permit No. 0990234-023-AC
(PSD-FL-413A)
Palm Beach Renewable Energy Park
Palm Beach Renewable Energy Facility No. 2
Permit Modification
Palm Beach County

Facility Location: The Solid Waste Authority of Palm Beach County is constructing the new Palm Beach Renewable Energy Facility No. 2 at the existing Palm Beach Renewable Energy Park, which is located in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida.

Project: Permit No. 0990234-017-AC (PSD-FL-413) authorized the construction of the Palm Beach Renewable Energy Facility No. 2. This facility will consist of three 1,000 tons per day mass-burn municipal waste combustor units and one 90 to100 megawatt steam turbine electrical generator. The proposed work will be conducted at the existing Palm Beach Renewable Energy Park. Permit No. 0990234-017-AC also authorized the construction of three lime storage silos; one carbon storage silo; two diesel fire pump engines; one emergency generator; several fuel oil storage tanks; and one ash handling system and building.

This permitting action modifies the original permit to increase the size of the emergency fire pump engines from 250 horsepower to 305 horsepower, while also increasing the size of the emergency generator from 250 kilowatts to 2,500 kilowatts. Along with the generator size increase, its fuel oil storage tank will be increased in size from 1,000 gallons to 3,500 gallons. In addition, the restriction on the duration of each emergency equipment maintenance and testing event to 30 minutes in any hour will be removed. The designations of the three municipal waste combustors authorized by Permit No. 0990234-017-AC will be changed from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 so as not to be confused with the two municipal waste combustors (Nos. 1 and 2) currently in operation at the Palm Beach Renewable Energy Park. Finally, an incorrect federal rule citation pertaining to ammonia or urea storage was corrected.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Division of Air Resource Management's (DARM) Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet 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 Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; 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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, 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 including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Jeffery F. Koerner, Program Administrator

Office of Permitting and Compliance Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mark Hammond, SWA, Executive Director: mhammond@swa.org

Cindy Mulkey, DEP Siting: cindy.mulkey@dep.state.fl.us Kevin Claridge, DEP SED: kevin.claridge@dep.state.fl.us

Jim Stormer, Palm Beach County Health Department: james stormer@doh.state.fl.us

Kathy Forney, EPA Region 4: forney.kathleen@epa.gov Heather Ceron, EPA Region 4: Ceron.Heather@epa.gov.

Dee Morse, NPS: dee morse@nps.gov

Amit Chattopadhyay, P.E., Malcolm Pirnie: achattopadhyay@pirnie.com

Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us Lynn Scearce, DEP BAR Reading File: lynn.scearce@dep.state.fl.us

Clerk Stamp

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

DRAFT PERMIT

PERMITTEE

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, FL 33412

Authorized Representative: Mark Hammond, Executive Director Air Permit No. 0990234-023-AC
(PSD-FL-413A)
Palm Beach Renewable Energy Park
Palm Beach Renewable Energy Facility No. 2
Modification of Emergency Equipment
Expires: December 31, 2015
Palm Beach County

PROJECT

This is the final permit to modify Permit Number (No.) 0990234-017-AC (PSD-12-413) to change the sizes of the emergency generator and fire pump engines, i.e., emergency equipment, at the permitted but yet to be constructed Palm Beach Renewable Energy Center Facility No. 2 (PBREF-2). The restriction that the duration of each emergency equipment maintenance and testing event shall not exceed 30 minutes in any hour and shall not be conducted concurrently with maintenance and testing of other emergency equipment was removed. The emergency equipment will be located at the existing Palm Beach Renewable Energy Park, which is a municipal solid waste (MSW) facility categorized under Standard Industrial Classification No. 4953. Another modification is changing the designations for the three new municipal waste combustors (MWC) of the PBREF-2 from Nos. 1, 2 and 3 to Nos. 3, 4 and 5. This modification is being done to distinguish the three new MWC from the two existing MWC (Nos.) and 2) currently in operation at the PBREP. Finally, the fuel oil storage tank for the emergency generator is increased in size from 1,000 gallons to 3,500 gallons due to the larger size of the generator and an incorrect federal rule citation is corrected. The existing facility is located in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida. The UTM coordinates are Zone 17, 585.3 kilometers (km) East, and 2961.7 km North.

This final permit modification is organized into the following sections: Section 1 (General Information), including changes to emission unit (EU) descriptions, and Section 2 (Air Permit Modifications): As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. as well as those for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Riorida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahasseel Florida, 32399;3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed within the Cerk of the Department.

Executed in Tallahassee, Florida

(DRAFT)

Jeffery F. Koerner, Administrator
Office of Permitting and Compliance

(Date)

Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mark Hammond, SWA, Executive Director: mhammond@swa.org Cindy Mulkey, DEP Siting: cindy.mulkey@dep.state.fl.us

Kevin Claridge, DEP SED: <u>kevin.claridge@dep.state.fl.us</u>

Jim Stormer, Palm Beach County Health Department: james stormer@doh.state.fl.us

Kathy Forney, EPA Region 4: forney.kathleen@epa.gov

Heather Ceron, EPA Region 4: Ceron. Heather@epa.gov

Dee Morse, NPS: dee morse@nps.gov

Amit Chattopadhyay, P.E., Malcolm Pirnie: achattopadhyay@pirnie.com

Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.flus

Lynn Scearce, DEP BAR Reading File: lynn scearce@dep.state.flus

Clerk Stamp

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

(Draft)

(Clerk)

(Date)

FACILITY DESCRIPTION

Permit No. 0990234-017-AC (PSD-FL-413) authorized the construction of the PBREF-2. This facility will consist of three 1,000 TPD mass-burn MWC units each with a maximum steam production rate of 320,100 pounds per hour (lb/hr) on a 4-hour average block basis and one 90 to 100 megawatt (MW) steam turbine electrical generator (STG). The proposed work will be conducted at the existing PBREP.

PROPOSED PROJECT

Permit No. 0990234-017-AC (PSD-FL-413) also authorized the construction of three lime storage silos; one carbon storage silo; two diesel fire pump engines; one emergency generator; several fuel oil storage tanks; and one ash handling system and building. During final engineering design of the project, the applicant determined that the emergency equipment consisting of the two fire pump engines and the emergency generator needed to be increased in size. Specifically, the fire pump engines needed to be increased from 250 horsepower (hp) to 305 hp, while the emergency generator need to be increased in size from 250 kilowatts (kW) to 2 500 kW. Along with the generator size increase, the permittee requested that its fuel oil storage tank be increased in size from 1,000 gallons to 3,500 gallons. The permittee also requested that the restriction that the duration of each emergency equipment maintenance and testing event shall not exceed 30 minutes in any hour, and shall not be conducted concurrently with maintenance and testing of other emergency equipment, be removed. In addition, the permittee requested that the designations of the three MWC authorized by Permit No. 0990234-017-AC (PSD-FL-413) be changed from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 so as not to be confused with the two MWC (Nos. 1 and 2) currently in operation at the PBREP. This permitting action modifies the original permit to increase the size of the emergency equipment, the size of one fuel oil storage tank, change the number designations of the three new MWC at the PBREF-2 and remove the maintenance and testing time restriction that applies to the emergency equipment.

As shown below, this permitting action modifies the emission unit descriptions of Subsection I of Permit No. 0990243-017-AC. Additions are denoted with double-underline and deletions are denoted with strikethrough.

Facility ID N	o. 0990234
EU ID No.	, definition EU Description
024	Municipal Solid Waste Combustor No. 1 No. 3
025	Municipal Solid Waste Combustor, No. 2 No. 4
026	Municipal Solid Waste Combustor No. 3 No. 5
081	250 305 hp Diese Fire Pump Engine A
032	250 305 hp Diesel Fire Pump Engine B
The second secon	250 21500 Kilowatt (KW) Emergency Generator
on control of the con	* Company of the Comp

FACILITY REGULATORY CLASSIFICATION

- The existing PBREP and the new PBREF-2 are major sources of HAP.
- The PBREP and the PBREF-2 are not subject to the acid rain provisions of the Clean Air Act (CAA).
- The PBRER is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The PBREP is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- The PBREF-2 is a modification of a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

• The PBREF-2 is subject to New Source Performance Standards (NSPS) under Section 111 of the CAA and National Emissions Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the CAA which are incorporated by reference in Chapter 62-204.800, F.A.C.

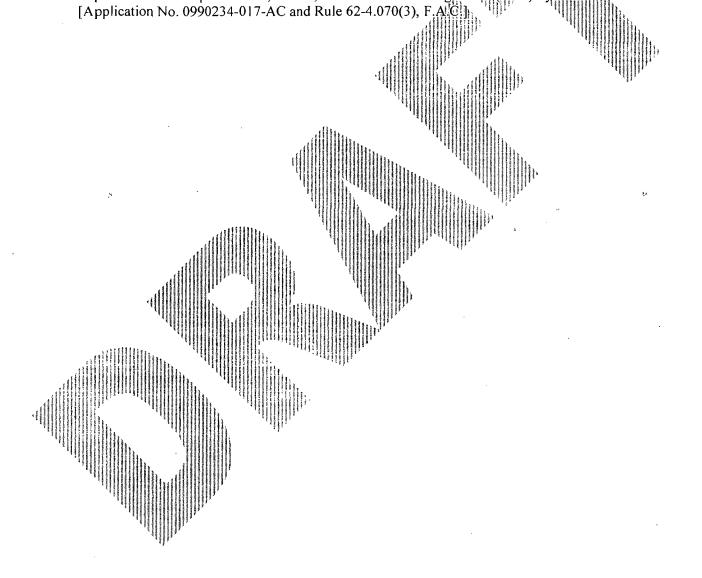


Municipal Solid Waste Combustors (MWC) Units 1, 2, and 3 (EU Nos. 024, 025 and 026)

Permit Modified: 0990234-017-AC (PSD-FL-413) Subsection 3.A. Municipal Solid Waste Combustors (MWC) Units 1, 2, and 3 (EU Nos. 024, 025 and 026)

As shown below, this permitting action modifies one condition of Subsection III.A of Permit No. 0990234-017-AC. As before, additions are denoted with <u>double-underline</u> and deletions are denoted with <u>strikethrough</u>.

3. Aqueous Ammonia or Urea Storage Tank: The permittee is authorized to construct a nominal 30,000 gallon or smaller tank to store aqueous ammonia or urea for the SCR systems. In accordance with 40 CFR 60 68.130, the storage of aqueous ammonia or urea shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68. The tank designed and fabricated in accordance with U.S. Department of Labor Chapter 29, Part 1910.111, Code of Federal Regulations (CFR), American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, ANSI K 61.1, and applicable requirements of Chapter 62-762, F.A.C., Above Ground Storage Tank (AST) Systems.



SECTION 2. AIR PERMIT MODIFICATIONS (DRAFT)

Diesel Fire Pump Engines (EU Nos. 031 and 032)

Permit Modified: 0990234-017-AC (PSD-FL-413)

Subsection 3.C. Diesel Fire Pump Engines (EU Nos. 031 and 032)

As shown below, this permitting action modifies Subsection III.C of Permit No. 0990234-017-AC. As before, additions are denoted with double-underline and deletions are denoted with strikethrough.

This section of the permit addresses the following EU.

EU ID No.	Emission Unit Description (
031	One emergency diesel firewater pump engine with a maximum design rating of 250 305 hp
032	One emergency diesel firewater pump engine with a maximum design rating of 250 305 hp

NSPS AND NESHAP APPLICABILITY

- 1. NSPS Subpart IIII Applicability: Each pump engine is an Emergency Stationary Compression Ignition Internal Combustion Engine (Stationary ICE) and shall comply with applicable provisions of 40 CFR 60, Subpart IIII. [40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines]
- 2. NESHAP Subpart ZZZZ Applicability: The emergency pump engines are Liquid Fueled Reciprocating Internal Combustion Engines (RICE) and shall comply with applicable provisions of 40 CFR 63, Subpart ZZZZ. Pursuant to 40 CFR 63.6590(c) the engines must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII [40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

EOUIPMENT SPECIFICATIONS

- 3. Engine Driven Fire Pumps: The permittee is authorized to install, operate, and maintain two emergency diesel fire pump engines. The pump engines will each have a maximum rating of 250 305 hp (186 227 kW) or smaller. [Application No. 0990234-017-AC and Rules 62-210.200(PTE) and 62-212.400 (BACT), F.A.C.]
- 4. <u>ULSD Fuel Oil Storage Tank: The permittee is authorized to construct a 1,000 gallon tank to store ULSD</u> fuel oil for use in the emergency diesel firewater pump engines. [Rule 62-4.070(3), F.A.C.]
 - {Permitting Note: The ULSD fuel oil storage tank for the emergency diesel firewater pump engines at the PBREF2 facility is not subject to NSPS Subpart Kb because it stores a liquid (ULSD fuel oil) with a maximum true(vapor pressure less than 3.5 kPa (0.51 pounds per square inch (psi)). Accordingly it is an unregulated
 - 40 CFR 60 110b(a) and (c) and Rule 62-204.800(7)(b), F.A.C.]

ERFORMANCE RESTRICTION

- Hours of Operation Each fire pump engine may operate up to 100 hours per year for maintenance and testing ourposes. The duration of each maintenance and testing event for each pump engine shall not exceed 30 minutes in any hour, and shall not be conducted concurrently with maintenance and testing of the other pump engine nor the emergency generator diesel engine.
 - [Application No. 0990234-017-AC; Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]
- 6. Authorized Fuel: Each pump engine shall fire ULSD fuel oil. The ULSD fuel oil shall contain no more than 0.0015% sulfur by weight. [Application No. 0990234-017-AC; Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]

à

Diesel Fire Pump Engines (EU Nos. 031 and 032)

EMISSION STANDARDS

7. Emissions Limits: The emergency fire pump engines shall comply with the following emission limits and demonstrate compliance in accordance with the procedures given in 40 CFR 60, Subpart IIII. Manufacturer certification may be provided to the Department in lieu of actual testing. [40 CFR 60.4211 and Rule 62-4.070(3), F.A.C.]

Emergency Pumps $(1.75 \ \underline{300} \ \text{hp} \le \text{and} < 300 \ \underline{6}$		PM (g/hp-hr)	\$0 ₂	$ \begin{array}{c} NMHC^3+NO_X \\ (g/hp-hr) \end{array} $
Subpart IIII (2009 and I	ater) 2.6	0.15	1000 mm 1000 m	3.0

- 1. g/hp-hr means grams per horsepower-hour.
- 2. SO₂ emission standard will be met by using ULSD fuel oil in the fire pumplengines with fuel sulfur (S) content of 0.0015% by weight.
- 3. Non-Methane Hydrocarbons

[Application No. 0990234-017-AC; 40 CFR 60, NSPS Subpart [1]; and Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

RECORDS AND REPORTS

8. Notification, Recordkeeping and Reporting Requirements: The permittee shall adhere to the compliance testing and certification requirements listed in 40 CFR 60.4211 and maintain records demonstrating fuel usage and quality. [Rule 62-212.400 (BACT), F.A.C. and 40 CFR 60.4211]



SECTION 2. AIR PERMIT MODIFICATIONS (DRAFT)

Emergency Generator (EU-033)

Permit Modified: 0990234-017-AC (PSD-FL-413) Subsection 3.D. Emergency Generator (EU No. 033)

This section of the permit addresses the following emissions unit.

EU ID No.	Emission Unit Description
033	One emergency diesel generator with a maximum design rating of 250 2500 kW

NSPS AND NESHAP APPLICABILITY

- Combustion Engine (Stationary ICE) and shall comply with applicable provisions of 40 CFR 60, Subpart IIII, including emission testing or certification. [40 CFR 60 Subpart IIII] 1. NSPS Subpart IIII Applicability: This emergency generator is a Stationary including emission testing or certification. [40 CFR 60, Subpart III] Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 2. NESHAPS Subpart ZZZZ Applicability: The emergency generator is a Liquid Fueled Reciprocating Internal Combustion Engine (RICE) and shall comply with applicable provisions of 40 CFR 63, Subpart ZZZZ. Pursuant to 40 CFR 63.6590(c) the generators must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. [40 CFR 63, Subpart ZZZZ - National Emission Standards for Flazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)]

EQUIPMENT

- Emergency Generator: The permittee is authorized to install, operate and maintain one emergency generator with a maximum design rating of 250 2,500 kW (335 5,364 hp) or smaller. 3. Emergency Generator: The permitted is [Application No. 0990234-017-AC and Rules 62-210 2000 (PTE) and 62-212.400 (BACT), F.A.C.]
- 4. <u>ULSD Fuel Oil Storage Tank</u>: The permittee is authorized to construct a 1,000 3,500 gallon tank to store ULSD fuel oil for use in the emergency diesel generator. [Rule 62-4.070(3), F.A.C.]

{Permitting Note: The ULSD fuel oil storage tank for the emergency diesel generator at PBREF No. 2 is not subject to NSPS Subpart Kb because it stores a liquid (ULSD fuel oil) with a maximum true vapor pressure less than 3.5 kPa (0.51 pounds per square inch (psi)). Accordingly it is an unregulated emissions unit.} [40 CFR 60.110b(a) and (c) and Rule 62-204 800(7)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

- Hours of Operation: The emergency generator may operate up to 100 hours per year for maintenance and testing purposes. The duration of each maintenance and testing event shall not exceed 30 minutes in any hour, and shall not be conducted concurrently with maintenance and testing of the emergency fire water pump diesel engines.
 - [Application No. 10990234-017-AC and Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]
- Authorized Fuel: The emergency generator shall fire ULSD fuel oil. The ULSD fuel oil shall contain no more than 0.0015% sulfur by weight.
 - 10. 0990234-017-AC and Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]

Emergency Generator (EU-033)

EMISSION STANDARDS

7. <u>Emissions Limits:</u> The emergency generator shall comply with the following emission limits and demonstrate compliance in accordance with the procedures given in 40 CFR 60, Subpart IIII. Manufacturer certification can be provided to the Department in lieu of actual stack testing.

Emergency Generate		СО	PM	1 155.331	NMHC ³ +NO _X
$(225 \text{ kW} \le \text{and} < 450)$	kW <u>kW> 560</u>)	(g/kW-hr) ¹	(g/kW-hr)	(% S)	(g/kW-hr)
Subpart IIII (2007 and	later)	3.5	0.20	0.0015	4.0 <u>6.4</u>

- 1. g/kW-hr means grams per kilowatt-hour.
- 2. SO₂ emission standard will be met by using ULSD fuel oil in the emergency generator with fuel sulfur (S) content of 0.0015% by weight.
- 3. NMHC means Non-Methane Hydrocarbons.

[Application No. 0990234-017-AC, NSPS Subpart IIII; and Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

RECORDS AND REPORTS

8. Notification, Recordkeeping and Reporting Requirements: The permittee shall adhere to the compliance testing and certification requirements listed in 40 CFR 60.4211 and maintain records demonstrating fuel usage and quality. [40 CFR 60.4211]





TECHNICAL EVALUATION & PRELIMINARY DETERMINATION

APPLICANT

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, FL 33412

Palm Beach Renewable Energy Park Palm Beach Renewable Energy Facility No. 2

Facility ID No. 0990234

PROJECT

Project No. 0990234-023-AC (PSD-FL-413A)
Air Construction Permit
Modification of Emergency Equipment

COUNTY

Palm Beach County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection Division of Air Resource Management Office of Permitting and Compliance Chemicals and Combustion Group 2600 Blair Stone Road, MS#5505 Tallahassee, Florida 32399-2400

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Chapters 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations in Rule 62-204.800, F.A.C.

Facility Description and Location

Permit No. 0990234-017-AC (PSD-FL-413) authorized the construction of the Palm Beach Renewable Energy Facility No. 2. This facility will consist of three 1,000 tons per day mass-burn municipal waste combustor units and one 90 to100 megawatt steam turbine electrical generator. The proposed work will be conducted at the existing Palm Beach Renewable Energy Park. The existing facility is located in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida. The UTM coordinates are Zone 17, 585.3 kilometers (km) East, and 2961.7 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The existing Palm Beach Renewable Energy Park and the new Palm Beach Renewable Energy Facility No. 2 are major sources of Hazardous air pollutants (HAP).
- The Palm Beach Renewable Energy Park and the Palm Beach Renewable Energy Facility No. 2 are not subject to the acid rain provisions of the Clean Air Act (CAA).
- The Palm Beach Renewable Energy Park is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The Palm Beach Renewable Energy Park is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- The Palm Beach Renewable Energy Facility No. 2 is a modification of a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The Palm Beach Renewable Energy Facility No. 2 is subject to NSPS under Section 111 of the CAA and NESHAP under Section 112 of the CAA which is incorporated by reference in Chapter 62-204.800, F.A.C.

Project Description

Permit No. 0990234-017-AC (PSD-FL-413) also authorized the construction of three lime storage silos; one carbon storage silo; two diesel fire pump engines; one emergency generator; several fuel oil storage tanks; and one ash handling system and building. During final engineering design of the project, the applicant determined that the emergency equipment consisting of two fire pump engines and the emergency generator needed to be increased in size. Specifically, the fire pump engines needed to be increased from 250 horsepower to 305

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

horsepower, while the emergency generator needs to be increased in size from 250 kilowatts to 2,500 kilowatts. Along with the generator size increase, the permittee requested that its fuel oil storage tank be increased in size from 1,000 gallons to 3,500 gallons. The permittee also requested that the restriction that the duration of each emergency equipment maintenance and testing event shall not exceed 30 minutes in any hour, and shall not be conducted concurrently with the maintenance and testing of other emergency equipment, be removed. The permittee requested that the designations of the three municipal waste combustors authorized by Permit No. 0990234-017-AC (PSD-FL-413) be changed from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 so as not to be confused with the two municipal waste combustors (Nos. 1 and 2) currently in operation at the Palm Beach Renewable Energy Park. Finally, the permittee requested that an incorrect federal rule citation pertaining to ammonia or urea storage was corrected. This permitting action modifies the original permit to increase the size of the emergency equipment, the size of one fuel oil storage tank, change the number designations of the three new municipal waste combustors at the Palm Beach Renewable Energy Facility No. 2, remove the maintenance and testing time restriction that applies to the emergency equipment and correct the federal rule citation.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the ambient air quality standards or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions from the proposed project itself will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_x); sulfur dioxide (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans (dioxin/furan); municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO₂ and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 micrograms per meter cubed on a 24-hour average basis.

If the potential emission equals or exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

Based on the emission rates for the larger emergency equipment provided by the applicant, the Department calculated the increase in emission when compared to the smaller emergency equipment previously permitted. The following table summarizes potential increase in emissions and PSD applicability for the project.

	Annual Em	issions, Tons per Y			
Pollutant	Original Emergency Equipment	New Emergency Equipment	Potential Increase	PSD SER ¹	Trigger PSD
CO	0.15	0.31	0.15	100	NO
NO _X	0.29	2.50	2.21	40	NO
PM	<0.01	< 0.01	Neg ²	25	NO
PM ₁₀	< 0.01	< 0.01	Neg ²	15	NO
PM _{2.5}	< 0.01	< 0.01	Neg ²	10	NO
SO ₂	< 0.01	< 0.01	Neg ²	40	NO
VOC	< 0.01	< 0.01	Neg ²	40	NO

Table 1. Summary of the PSD Applicability Analysis

As shown in the above table, total project emissions as a result of the emergency equipment change are very low with all project emissions are well below the PSD significant emissions rates. Pursuant to PSD preconstruction review, the original permit made BACT determinations for the emergency equipment (fire pumps and generator) for CO, NO_X, PM, PM₁₀, SO₂ and VOC. Therefore, increasing the size of the emergency equipment requires a reexamination of the original BACT determinations.

All the other changes resulting from this permitting action; specifically, correcting a federal rule citation, changing the fuel oil storage size, removing the restriction with regard the duration of each emergency equipment testing event and changing the designations of the three municipal waste combustors do not affect pollutant emissions. Consequently, they have no affect on PSD applicability.

3. DEPARTMENT REVIEW

Original BACT Determination (Permit No. PSD-FL-413)

The increase in the size of the emergency equipment requires a new BACT determination; however, it does not change the applicability of any other state or federal regulations. The original BACT determination was that the emergency equipment must meet the requirements of NSPS 40 CFR 60, Subpart IIII - Stationary Compression Ignition Internal Combustion Engines. Subpart IIII contains limits on CO, PM, SO₂ and NO_X plus NMOC. The SO₂ emission limit was met by using ultra low sulfur distillate fuel oil with a sulfur content less than or equal to 0.0015 percent. All other emission limits were massed based as a function of power output: grams per hp-hour or grams per kilowatt-hour.

While small pollutant emission increases will occur as a result of this project, with the exception of NO_X (2.21

¹ PSD significant emission rate (SER) in tons per year (TPY).

² Negligible increase in emissions.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

TPY), all the rest or less than 0.01 TPY. The previous BACT, i.e., meet Subpart IIII requirements, is still valid.

Air Quality Analysis

Air modeling is not required for emergency equipment.

Conclusion

The final permit (0990234-023-AC and PSD-FL-413A) will be modified to make the following changes:

- Correct a federal rule citation on page 8 of Section 3.A. pertaining to Specific Condition 3. The second sentence currently reads "In accordance with 40 CFR 60.130, the storage of aqueous ammonia or urea shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68." The federal rule should be 40 CFR 68.130 not 40 CFR 60.130.
- Increase the size of the emergency equipment:
 - o The fire pump engines from 250 horsepower to 305 horsepower; and
 - o The emergency generator from 250 kilowatts to 2,500 kilowatts.
- Increase the size of the emergency generator fuel oil storage tank from 1,000 gallons to 3,500 gallons.
- Change the number designations of the three new municipal waste combustors at the Palm Beach Renewable Energy Facility No. 2 from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 so as not to be confused with the two municipal waste combustors (Nos. 1 and 2) currently in operation at the Palm Beach Renewable Energy Park.
- Remove the maintenance and testing time restriction that applies to the emergency equipment.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project involves the modification emergency equipment that is not subject to air modeling and other modifications do not result in air emission increases. David Read is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Office of Permitting and Compliance at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

P.E. CERTIFICATION STATEMENT

PERMITTEE

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, Florida 33412

Authorized Representative: Mark Hammond, Executive Director Air Permit No. 0990234-023-AC(PSD-FL-413A)
Palm Beach Renewable Energy Park
Palm Beach Renewable Energy Facility No. 2
Modification of Emergency Equipment
Expires: December 31, 2015
Palm Beach County

PROJECT DESCRIPTION

This is a draft permit modification to change the sizes or testing restrictions of the emergency generator, fire pump engines and associated fuel oil storage tank at the Palm Beach Renewable Energy Center Facility No. 2, which is under construction.

The emergency engines will comply with the applicable New Source Performance Standards pursuant to Title 40, Code of Federal Regulations (40 CFR) part 60, subpart IIII and the National Emission Standards for Hazardous Air Pollutants pursuant to 40 CFR part 63, subpart ZZZZ. These regulations satisfy the best available control technology requirements for emergency equipment located at a project previously permitted under the rules for the prevention of significant deterioration. No further air quality analysis was required.

The details of the original permit issued for the Palm Beach Renewable Energy Center Facility No. 2 as well as the details of the present request and draft permit modification are available at:

www.dep.state.fl.us/Air/emission/bioenergy/palm_beach.htm

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Chapters 62-4 and 62-204 through 62-297, F.A.C.. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features).

A. A. Linero, P.E.

Registration Number 26032

Scearce, Lynn

From: Scearce, Lynn

Sent: Friday, December 02, 2011 3:55 PM

To: 'mhammond@swa.org'

Cc: 'Mulkey, Cindy'; Linero, Alvaro; 'kevin.claridge@dep.state.fl.us';

'james_stormer@doh.state.fl.us'; 'forney.kathleen@epa.gov'; 'ceron.heather@epa.gov'; 'dee_morse@nps.gov'; 'achattopadhyay@pirnie.com'; Read, David; Friday, Barbara; Scearce,

Lynn

Subject: 0990234-023-AC (PSD-FL-413A), Palm Beach Renewable Energy Facility No. 2, Draft Permit

Attachments: 0990234-023-AC-PSD-FL-413A, signature page.pdf

Tracking: Recipient Delivery Read

'mhammond@swa.org'

'Mulkey, Cindy' Read: 12/2/2011 4:01 PM
Linero, Alvaro Delivered: 12/2/2011 3:55 PM Read: 12/2/2011 3:55 PM

'kevin.claridge@dep.state.fl.us' Delivered: 12/2/2011 3:55 PM

'james_stormer@doh.state.fl.us'
'forney.kathleen@epa.gov'
'ceron.heather@epa.gov'
'dee_morse@nps.gov'
'achattopadhyay@pirnie.com'

 Read, David
 Delivered: 12/2/2011 3:55 PM

 Friday, Barbara
 Delivered: 12/2/2011 3:55 PM

 Scearce, Lynn
 Delivered: 12/2/2011 3:55 PM

 Mulkey, Cindy
 Delivered: 12/2/2011 3:55 PM

Dear Mr. Hammond:

Attached is the official **Draft Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Owner/Company Name: SOLID WASTE AUTHORITY OF PBC Facility Name: SOLID WASTE AUTHORITY OF PBC/NCRRF

Project Number: 0990234-023-AC

Permit Status: DRAFT

Permit Activity: CONSTRUCTION Facility County: PALM BEACH

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0990234.023.AC.D pdf.zip

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above,

or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

Regards,
Lynn Scearce
Office of Permitting and Compliance (OPC)
Division of Air Resources Management
850-717-9025

Scearce, Lynn

From:

James_Stormer@doh.state.fl.us

To:

Scearce, Lynn

Sent:

Friday, December 02, 2011 4:21 PM

Subject:

Read: 0990234-023-AC (PSD-FL-413A), Palm Beach Renewable Energy Facility No. 2, Draft

Permit

Your message was read on Friday, December 02, 2011 4:20:46 PM (GMT-05:00) Eastern Time (US & Canada).

Memorandum

Florida Department of **Environmental Protection**

To:

Jeff Koerner, Administrator OPO

Through: A.A. Linero, P.E., OPC/Chemical Combustion Group

From:

David Read, OPC/Chemical Combustion Group

Date:

November 29, 2011

Subject:

Draft Air Permit No. 0990234-023-AC (PSD-FL-413A)

Palm Beach Renewable Energy Facility No. 2 Permit Modification for Emergency Equipment

Attached for your review is a draft permit modification package for the Solid Waste Authority of Palm Beach County pertaining to the Palm Beach Renewable Energy Facility No. 2, located at the existing Palm Beach Renewable Energy Park in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida. Briefly, the draft permit authorizes modification of the original permit to increase the size of the emergency equipment consisting of two fire pumps and one generator.

The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. Day 90 of the permitting time clock is January 29, 2012.

No jobs will result from this project which is just a small change to a previous project. However, the previous project will produce 400 jobs during construction and 70 for future operations.

Attachments

JK/aal/dlr

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
Draft Air Construction Permit Modification
Project No. 0990234-023-AC (PSD-FL-413A)
Solid Waste Authority of Palm Beach County, Palm Beach Renewable Energy Facility No. 2
Palm Beach County, Florida

Applicant: The applicant for this project is the Solid Waste Authority of Palm Beach County. The applicant's authorized representative and mailing address is: Mr. Mark Hammond, Executive Director, Solid Waste Authority of Palm Beach County, 7501 North Jog Road, West Palm Beach, Florida 33412.

Facility Location: The Solid Waste Authority of Palm Beach County is constructing the new Palm Beach Renewable Energy Facility No. 2 at the existing Palm Beach Renewable Energy Park, which is located in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida.

Project: Permit No. 0990234-017-AC (PSD-FL-413) authorized the construction of the Palm Beach Renewable Energy Facility No. 2. This facility will consist of three 1,000 tons per day mass-burn municipal waste combustor units and one 90 to100 megawatt steam turbine electrical generator. The proposed work will be conducted at the existing Palm Beach Renewable Energy Park. Permit No. 0990234-017-AC also authorized the construction of three lime storage silos; one carbon storage silo; two diesel fire pump engines; one emergency generator; several fuel oil storage tanks; and one ash handling system and building.

This permitting action modifies the original permit to increase the size of the emergency fire pump engines from 250 horsepower to 305 horsepower, while also increasing the size of the emergency generator from 250 kilowatts to 2,500 kilowatts. Along with the generator size increase, its fuel oil storage tank will be increased in size from 1,000 gallons to 3,500 gallons. In addition, the restriction on the duration of each emergency equipment maintenance and testing event to 30 minutes in any hour will be removed. The designations of the three municipal waste combustors authorized by Permit No. 0990234-017-AC (PSD-FL-413) will be changed from Nos. 1, 2 and 3 to Nos. 3, 4 and 5 so as not to be confused with the two municipal waste combustors (Nos. 1 and 2) currently in operation at the Palm Beach Renewable Energy Park. Finally, an incorrect federal rule citation pertaining to ammonia or urea storage was corrected.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (F.A.C.). Based on the air permit application, the project will result in potential emissions increases of 2.21 tons per year of nitrogen oxides (NO_X) and negligible increases of carbon monoxide (CO), particulate matter (PM), particulate matter with a mean diameter of 10 microns or less (PM₁₀), particulate matter with a mean diameter of 2.5 microns or less (PM_{2.5}), sulfur dioxide (SO₂) and volatile organic compounds (VOC). Pursuant to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality, the original permit made Best Available Technology (BACT) determinations for the emergency equipment (two fire pumps and one generator) for CO, NO_X, PM, PM₁₀, SO₂ and VOC. Therefore, the request to increase the increase the size of the emergency equipment requires a reexamination of the BACT determinations. After review, the Department reaffirms the original BACT determinations for the emergency equipment, which are based NSPS 40 CFR 60, Subpart IIII – New Standards for Stationary Compression Ignition Internal Combustion Engines. Based on the very low annual emissions increases, the project will have negligible ambient annual impacts.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Office of Permitting and Compliance in the Department of Environmental Protection's Division of Air Resource Management. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's phone number is 850-717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the physical address indicated above for the

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and information submitted by the applicant (exclusive of confidential records under Section 403.111, F.S.). Interested persons may contact the Permitting Authority's project engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/emission/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; 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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, 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 including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available for this proceeding.