Memorandum

TO:

Joseph Kahn, Division of Air Resource Management

THROUGH:

Trina Vielhauer, Bureau of Air Regulation and for Tev

Al Linero, Special Projects Section

FROM:

Bobby Bull, New Source Review Section

DATE:

December 17, 2010

SUBJECT:

Draft Air Permit No. 0990234-017-AC (PSD-FL-413)

Solid Waste Authority of Palm Beach County

Palm Beach Renewable Energy Park

Palm Beach Renewable Energy Facility No. 2 (PBREF-2)

The final permit for this project is attached for your approval and signature. The project requires a PSD preconstruction review permit to authorize construction of the new PBREF-2, which will be located at the existing Palm Beach Renewable Energy Park in Palm Beach County at 7501 North Jog Road in West Palm Beach, Florida.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

JK/tlv/aal/rlb



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor Jeff Kottkamp Lt. Governor Mimi A. Drew Secretary

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. 0990234-017-AC (PSD-FL-413)
Palm Beach Renewable Energy Park
Palm Beach Renewable Energy Facility No. 2

Expires: December 31, 2015

Palm Beach County

PROJECT

This is the final air construction permit authorizing the construction of three 1,000 tons per day (TPD) mass-burn municipal waste combustors (MWC), a 90 to 100 megawatts (MW) steam turbine-electrical generator (STG) and ancillary equipment. The proposed work will be conducted at the existing Palm Beach Renewable Energy Park (PBREP), which is a municipal solid waste (MSW) facility categorized under Standard Industrial Classification Number (No.) 4953. 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 is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix CF of Section 4 of this permit. 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. and 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 and a corresponding best available control (BACT) determination.

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 Florida 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, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

Joseph-Kahn, Director

Division of Air Resource Management

(Date)

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 with Appendices) 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 December 23, 2010 to the persons listed below.

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

Michael Halpin, DEP Siting: mike.halpin@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

Heather Abrams, EPA Region 4: abrams.heather@epa.gov

Dee Morse, NPS: dee morse@nps.gov

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

Sierra C. Wolfe, Public Commenter, sierra887@gmail.com

Vickie Gibson, DEP BAR Reading File: victoria.gibson@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.

Jaket Walker (Clerk)

FACILITY DESCRIPTION

The existing facility consists of the following emissions units (EU):

Facility ID No. 0990234			
EU ID No.	EU Description		
001	Municipal Solid	Waste Boiler No. 1	
002	Municipal Solid	Waste Boiler No. 2	
004	Class III Landfi	ll with Flare	
005	Refuse Derived	Fuel (RDF) Storage	
006	RDF Processing	; Lines	
007	Oversized Bulk	y Waste (OBW) Processing Lines	
008	Class I Landfill	with Flare	
010	Sludge Dryer Ti	rain No. 1	
011	Sludge Dryer Ti	Sludge Dryer Train No. 2	
012	Recycle Material Bin and Pellet Storage Silo for Train No. 1		
013	Cooling Tower Train No. 1		
014	Recycle Material Bin and Pellet Storage Silo for Train No. 2		
015	Cooling Tower Train No. 2		
016	Emergency Generator		
017	Woody Waste Facility Diesel Engine		
018	Cooling Tower		
019	Ash Building and Handling System		
021	Emergency Generator, 220 break-horsepower (hp), EPA Tier III Certified		
023	Powdered Activated Carbon Silo with Baghouse		

PROPOSED PROJECT

The permit authorizes the construction of the Palm Beach Renewable Energy Facility No. 2 (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. The project also includes a 90 to100 MW STG; three lime storage silos; one carbon storage silo; two diesel fire pump engines; one emergency generator; and one ash handling system and building. The proposed work will be conducted at the existing PBREP.

The project will incorporate the following pollution control equipment and measures:

- For each MWC unit, good combustion practices (GCP), spray dryers (SD), fabric filter (FF) baghouses, activated carbon injection (CI), selective catalytic reduction (SCR), as an option selective non-catalytic reduction (SNCR) and use of inherently clean natural gas as a startup, shutdown and flame stabilization fuel.
- Use of inherently clean ultra low sulfur distillate (ULSD) fuel oil and GCP in the emergency generator and emergency fire pump engines; and
- Reasonable precautions and best management practices (BMP) to minimize fugitive particulate matter (PM)/(PM₁₀)/(PM_{2.5}) emissions from MSW handling and processing; ash (bottom and fly) handling, storage and shipment; lime handling, storage and processing; and activated carbon handling, storage and processing.

The project will incorporate continuous emission monitoring systems (CEMS) for CO, SO₂, NO_X and Hg and continuous opacity monitoring systems (COMS) for visible emissions (VE).

This project will consist of the following EU:

Facility ID N	lo. 0990234	
EU ID No.	EU Description	
024	Municipal Solid Waste Combustor No. 1	
025	Municipal Solid Waste Combustor No. 2	
026	Municipal Solid Waste Combustor No. 3	
027	Lime Storage Silo A	
028	Lime Storage Silo B	
029	Lime Storage Silo C	
030	Activated Carbon Storage Silo	
031	250 hp Diesel Fire Pump Engine A	
032	250 hp Diesel Fire Pump Engine B	
033	250 Kilowatt (kW) Emergency Generator	
034	Ash Handling System and Building	

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 PBREP is a Title V major source of air pollution in accordance with Chapter 62-213, 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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. All documents related to applications for permits shall be submitted to the Bureau of Air Regulation in the Division of Air Resource Management of the Department.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Southeast District Office at: Air Resource Section, 400 North Congress Avenue, Suite 200, West Palm Beach, FL 33401.
- 3. <u>Appendices</u>: The following Appendices are attached as a part of this permit and the permittee must comply with the requirements of the appendices:

Appendix A Identification of General Provisions - NSPS 40 CFR 60, Subpart A;

Appendix A1 General Provisions - NSPS 40 CFR 63, Subpart A;

Appendix CC Common Conditions;

Appendix CEMS Continuous Emissions Monitoring System (CEMS) Requirements;

Appendix CF Citation Formats and Glossary of Common Terms;

Appendix CTR Common Testing Requirements;

Appendix Eb NSPS, 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste

Combustors;

Appendix GC General Conditions;

Appendix IIII NSPS, Subpart IIII – Stationary Compression Ignition Internal Combustion Engines;

Appendix XSE · Excess Emission Reporting Form; and,

Appendix ZZZZ NESHAP, Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines

(RICE).

- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. Source Obligation:
 - (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

- 8. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to Southeast District of DEP. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 9. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

 {Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}
- 10. <u>Unconfined Emissions of Particulate Matter</u>: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following: a. Paving and maintenance of roads, parking areas and yards; b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulates from becoming airborne; e. Landscaping or planting of vegetation; f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g. Confining abrasive blasting where possible; and h. Enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.]

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

This section of the permit addresses the following EU.

EU ID Nos. 024, 025 and 026

EU Descriptions

Description: These EU consist of three 1,000 TPD mass burn MWC units, each with a fossil fuel fired auxiliary burner system. The natural gas fired burner systems will be used as needed during periods of startup, shutdown and for flame stabilization. Each MWC unit will produce high pressure, high temperature (HPHT) steam that will be used in a single STG to generate 90 to 100 MW of electrical power.

Fuels: The primary boiler fuel for each MWC unit will be MSW and the other fuels as specified in **Specific** Condition 12 of this subsection. Natural gas will be used as a startup, shutdown and flame stabilization fuel in the auxiliary burner system.

Steam Capacity: The maximum steam production limit per unit on a 4 hour block average basis is 320,100 lb steam/hr.

Heat Input: The heat input required to generate the maximum steam capacity is approximately 458 million British thermal units per hour (mmBtu/hr). The maximum heat input limit for the natural gas burner system for each MWC unit is 246 mmBtu/hr during periods of startup, shutdown and for flame stabilization.

Controls for each MWC: The air pollution control systems will consist of GCP, SD, FF, CI, SCR and use of inherently clean natural gas as a startup, shutdown and flame stabilization fuel in the MWC.

Stack Parameters for each MWC: Each of the MWC units will have a separate exhaust flue. The exhaust flues will be co-located and contained in a common outer stack. Each stack flue will be approximately 8.1 feet in diameter (maximum) and 310 feet tall (minimum). Exhaust from each flue will exit the stack at the following approximate conditions: an exit temperature of 285 °F and a volumetric flow rate of 184,310 actual cubic feet per minute (acfm).

Continuous emissions and opacity monitoring systems (CEMS, COMS): Emissions of CO, NO_X, SO₂ and Hg from each MWC unit will be monitored and recorded by CEMS. Opacity (VE) from each unit will be monitored and recorded by a COMS.

Applicability of 40 CFR Subpart Eb (NSPS Subpart Eb): Each MWC unit is subject to NSPS Subpart Eb-Standards of Performance for Large Municipal Waste Combustors.

{Permitting Note: These emission units are subject to BACT determinations for NO_X , CO, SO_2 , PM, VOC, MWC acid gases as SO_2 +hydrogen chlorides (HCl), MWC organics as dioxin/furans (D/F), and MWC metals as PM.}

{Permitting Note: Unless otherwise specified in a **specific condition** of this subsection, the descriptions above under Description and Steam Capacity are not operating limitations.}

EQUIPMENT

- 1. <u>MWC Units</u>: The permittee is authorized to construct three MWC stoker boiler units each with a natural gas burner system, overfire air ports, steam drum, superheater, economizer, air heater, ash hoppers, ducts, fuel feeding equipment, dry cooling towers, air pollution control equipment and other associated equipment. [Application No. 0990234-017-AC]
- 2. <u>Air Pollution Control Equipment</u>: The permittee shall install the following add-on air pollution control equipment on each MWC unit.
 - a. <u>SD/FF Baghouse System</u>: The permittee shall design, install, operate and maintain a SD/FF baghouse system. The SD/FF baghouse system shall be brought on line in accordance with the manufacturer's procedures and guidelines and will be utilized whenever the MWC unit is in operation and burning MSW.
 - b. <u>SCR System</u>: The permittee shall design, install, operate, and maintain an ammonia (NH₃) or urea based SCR system including reagent storage tank, pumps, metering system, injection grid, reactor and catalyst to reduce NO_X emissions in the flue gas exhaust and achieve the NO_X emissions limit specified in this subsection. The SCR shall be brought on line in accordance with the SCR manufacturer's procedures and

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

- guidelines and shall be utilized whenever the MWC unit is in operation and burning MSW. The SCR system also represents BACT for D/F emissions.
- c. <u>SNCR System</u>: The permittee may install, operate, and maintain an NH₃ or urea based SNCR system including reagent storage tank, pumps, metering system and injection equipment to reduce NO_X in the furnace prior to further downstream treatment by the SCR system.
- d. Activate CI System and FF Baghouse: The permittee shall install, operate and maintain an activated CI system and FF baghouse (same baghouse used for SD) to capture the spent carbon. The CI system and FF baghouse shall be designed, constructed and operated to achieve the Hg and other metals emission limits specified in this subsection. The CI system shall be brought on line in accordance with the manufacturer's procedures and guidelines and will be utilized whenever the MWC unit is in operation and burning MSW.

[Application No. 0990234-017-AC; NSPS Subpart Db; and Rule 62-4.070(3), 62-210.200(PTE) and 62-212.400 (BACT), F.A.C.]

- e. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emissions of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 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 60.130, 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.

 [Application No. 0990234-017-AC and Rule 62-4.070(3), F.A.C.]

PERFORMANCE REQUIREMENTS AND MONITORING OF MWC OPERATIONS

- MWC Boiler Unit Fuels: Each MWC boiler unit is authorized to combust MSW and other fuels authorized in Specific Condition 12 of this subsection. In addition, each MWC unit is authorized to combust natural gas as a startup, shutdown and flame stabilization fuel.
 [Application No. 0990234-017-AC; Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400 (BACT), F.A.C.]
- Steam Production Limits: For each MWC unit, the maximum allowable steam production rate is 320,100 lb/hr (4 hour block average basis).
 [Application No. 0990234-017-AC; Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400 (BACT), F.A.C.]
- 6. Maximum Demonstrated MWC Unit Load: The maximum demonstrated MWC unit load shall be determined during the initial performance test for D/F and each subsequent performance test during which compliance with the D/F emission limit is achieved. The maximum demonstrated MWC unit load shall be the highest 4-hour arithmetic average load based on steam production achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved. Unit load means the steam load of the MWC measured as specified in 40 CFR 60.58b(I)(6). Each unit shall not operate at a load level greater than the steam production rate given in **Specific Condition 5** of this subsection or, if it is less, 110% of the unit's "maximum demonstrated unit load". Higher loads, within the limit in **Specific Condition 5** of this subsection, are allowed for testing purposes as specified in 40 CFR 60.53b(b). [40 CFR 60.34b(b), 60.51b, 60.53b(b), and 60.58b(i)(6)]
- 7. Steam Parameters: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain continuous monitoring and recording devices for the following parameters on each MWC unit: steam temperature (°F), steam pressure (psig) and steam production rate (lb/hour). Records shall be maintained on site and made available upon request. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

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

- 8. Steam Monitoring: MWC unit load means the steam load of the MWC unit measured as specified in §60.58b(i)(6). The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, shall measure steam flow in lb of steam/hr on a continuous basis, and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam flow shall be calculated in a 4 hour block arithmetic average. For each MWC unit, the maximum steam production limit corresponding to maximum demonstrated unit load is 320,100 lb/hr (4 hour block average basis). Higher unit loads are allowed for testing purposes pursuant to 40 CFR 60.53b(b). [Rules 62-204.800(8) and 62-4.070(1), and (3), F.A.C., and 40 CFR 60.53b(a), and 60.58b(i)]
- 9. <u>Heat Input from Fossil Fuels</u>: The maximum heat input capacity from natural gas for each MWC unit on a steady state basis during boiler startup, shutdown and flame stabilization shall be limited to 246 mmBtu/hr. [Application No. 0990234-017-AC; Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400 (BACT), F.A.C.]
- 10. Operational Hours: The hours of operation of these MWC units are not restricted (8,760 hours/year). [Application No. 0990234-017-AC; Rules 62-4.070(3) and 62-210.200(PTE)]

11. Prohibited Fuels:

- a. The facility shall not burn:
 - i. those materials that are prohibited by state or federal law;
 - ii. those materials that are prohibited by this permit;
 - iii. lead acid batteries;
 - iv. hazardous waste;
 - v. nuclear waste;
 - vi. radioactive waste;
 - vii. sewage sludge;
 - viii. explosives; and
 - ix. beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- b. Further, the facility shall not knowingly burn:
 - i. nickel-cadmium batteries pursuant to Section 403.7192 (3);
 - ii. mercury containing devices and lamps pursuant to Sections 403.7186(2), and (3);
 - iii. untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from similar generators (or sources);
 - iv. segregated loads of biological waste; and
 - v. Copper Chromated Arsenate (CCA) treated wood.
- 12. <u>Authorized Fuels:</u> The primary fuel for the facility is MSW, including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S. (1995). Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described below:
 - a. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:
 - i. Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
 - ii. Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
 - iii. Wood pallets, clean wood, and land clearing debris;
 - iv. Packaging materials and containers;

- A. Municipal Solid Waste Combustors (MWC) Units 1, 2, and 3 (EU Nos. 024, 025 and 026)
- v. Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
- vi. Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
- b. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with **Specific Condition 35** of this subsection.
- c. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as <u>segregated loads</u> and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with **Specific Condition 35** of this subsection.
 - i. Construction and demolition debris.
 - ii. Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
 - iii. Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
 - iv. Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
 - v. Waste materials that:
 - (a) are generated in the manufacture of items in categories (iii) or (iv), above and are functionally or commercially useless (expired, rejected or spent); or
 - (b) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
 - vi. Waste materials that contain oil from:
 - (a) the routine cleanup of industrial or commercial establishments and machinery; or
 - (b) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
 - vii. Used oil and used oil filters. Used oil containing a polychlorinated biphynels (PCB) concentration equal or greater than 50 parts per million (ppm) shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
 - {Permitting note: Waste materials specifically authorized above do not require Department approval.}
 - viii. Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW.

[Rule 62-4.070(1), and (3), F.A.C.]

- 13. <u>Segregated Loads</u>: The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is a segregated non-MSW material, the fuel shall be either:
 - a. well mixed with MSW in the refuse pit; or
 - b. alternately charged with MSW in the hopper.

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

- 14. <u>Combustion Practices</u>: To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:
 - a. comply with good combustion operating practices in accordance with 40 CFR 60.53b;
 - b. install, operate and maintain CEMS for oxygen, CO, SO₂, NO_X and temperature in accordance with 40 CFR 60.58b; and
 - c. record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit. Natural gas may be used as fuel during boiler startup, shutdown and flame stabilization, and at other times when necessary and consistent with good combustion practices.

NSPS APPLICABILITY

15. NSPS Subpart Eb and Subpart A Applicability: Each MWC unit, including the shared STG, are subject to all applicable requirements of 40 CFR 60, Subpart Eb which applies to Large Municipal Waste Combustors and Subpart A, General Provisions. The applicable conditions are given in Appendices A and Eb of this permit. [Rule 62-204.800(7)(b) and 40 CFR 60, NSPS-Subpart Eb and 40 CFR 60 Subpart A]

EMISSIONS STANDARDS

16. Emissions from each MWC unit (EU-024, EU-025 and EU-026) shall not exceed the following limits:

Pollutant Emission Standard/Limit ¹		lb/hour ²	Basis
NO	50 ppmvd – 24 hour block arithmetic mean	37.4	BACT
NO_X	45 ppmvd – 12 month rolling average		BACT
CO .	100 ppmvd – 4 hr block arithmetic mean	45.5	Subpart Eb
CO ,	80 ppmvd – 30-day rolling average		BACT
SO ₂	24 ppmvd – 24 hour geometric mean	25.0	BACT
HCl ³	20 ppmvd	11.9	BACT
VOC (as propane)	7 ppmvd	5.0	BACT
PM/PM ₁₀ /PM _{2.5}	12.0 mg/dscm	4.7	BACT
Lead (Pb)	125 μg/dscm	0.049	Avoid PSD
4	N/A ⁵	37.7 lb/yr ⁶	Avoid PSD
Hg ⁴	25 μg/dscm	0.0098	Applicant Request
Cadmium (Cd)	10 μg/dscm	3.91E ⁻⁰³	Subpart Eb
	13.0 ng/dscm		Subpart Eb
D/F ⁷	10 ng/dscm during initial two years		Initial Test
	0.75 to 10 ng/dscm 3 rd year and thereafter		BACT
Opacity	10 % – 6 minute average	N/A	BACT Subpart Eb
Ammonia Slip	ia Slip 10 ppmvd		PM, Opacity

All concentration values are corrected to 7% O₂: μg/dscm = micrograms per dry standard cubic meter; mg/dscm = milligrams per dry standard cubic meter; ng/dscm = nanograms per dry standard cubic meter; and ppmvd = part per million dry volume.

² Mass emission limits reflect maximum values calculated at 110% of 24 hour steam production limit of 291,000 lb steam/hr for each MWC. The 110% steam limit is 320,100 lb steam/hr for each MWC.

³ HCl is not a BACT pollutant. However, it must be limited together with SO₂ because they both comprise MWC-Acid Gases which has its own PSD threshold.

Within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup, PBREF-2 shall commence quarterly performance Hg stack test events for each MWC exhaust flue to show compliance with the 25 μg/dscm emission limit. The 25 μg/dscm quarterly stack based standard is based on the applicant's request. By meeting the quarterly stack test standard, PBREF-2 will show compliance with Subpart Eb Hg emission standard of 50 μg/dscm.

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

5 N/A = not applicable.

- The 37.7 lb/yr emission limit is a 12 month rolled monthly average based on CEMS data. The Hg CEMS must become operational within 60 days after PBREF-2 achieves its maximum production rate, but not later than 180 days after the initial startup. During the first four quarters of Hg CEMS availability, the CEMS must achieve an 80% data availability rate. Subsequently, an 85% data availability rate is required. See Appendix CEMS for the procedures to be used for data replacement during times of Hg CEMS unavailability.
- Dioxins/furans: Total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans. During the first year of the PBREF-2 operation of the 10 ng/dscm limit applies. Subsequently, the To Be Determined (TBD) limit will govern based on initial performance and efficiency tests at the inlet and outlet of the SCR as per **Specific Conditions 19 and 20** of this subsection. Based on these tests a D/F limit between 10 ng/dscm and 0.75 ng/dscm will be selected by the Department. The pound per hour limit will correspond to TBD ng/dscm limit.

TEST METHODS AND PROCEDURES

17. <u>Test Methods</u>: Any required stack test shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments	
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.	
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.	
6C	Determination of SO ₂ Emissions (Instrumental).	
7E	Determination of NO _X Emissions (Instrumental). NO _X emissions testing shall be conducted with the air heater operating at the highest heat input possible during the test.	
8	Measurement of Sulfuric Acid Mist	
9	Visual Determination of Opacity	
10	Measurement of Carbon Monoxide Emissions (Instrumental). The method shall be based on a continuous sampling train.	
13A or 13B	Measurement of Fluoride Emissions	
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography) '{Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the total hydrocarbons (THC) emissions measured by Method 25A.}	
23	Measurement of Dioxin/Furan Emissions	
26 or 26A	Determination of Hydrogen Chloride Emissions	
29	Determination of Metals Emissions from Stationary Sources (Hg, Cd, Pb)	
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.	

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "http://www.epa.gov/ttn/emc/ctm.html". The other methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. Tests shall be conducted in accordance with the appropriate test method and the applicable requirements specified in this permit, and NSPS Subpart A in 40 CFR 60. [Rules 62-204.800, F.A.C. and 40 CFR 60, Appendix A]

18. <u>Testing Requirements</u>: Initial tests shall be conducted between 90% and 100% of permitted capacity; otherwise, this permit shall be modified to reflect the true maximum capacity as constructed. Subsequent

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

- annual tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. [Rule 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8]
- 19. <u>Initial Compliance Demonstration</u>: Initial compliance stack tests shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup for each MWC unit. In accordance with the test methods specified in this permit, each units exhaust flue gas shall be tested to demonstrate compliance with the emission standards for NO_X, VOC, CO, SO₂, HCl, PM/PM₁₀/PM_{2.5}, Pb, Cd, Hg (quarterly), D/F (quarterly during first two years of operation at the inlet and outlet of the SCR and stack flue exhaust and annually thereafter), VE, and ammonia slip given in **Specific Condition 16** of this subsection. Relative Accuracy Test Audit (RATA) tests for CEMS can constitute initial stack tests for these pollutants. The permittee shall provide the Compliance Authority with any other initial emissions performance tests conducted to satisfy vendor guarantees.

 [Rule 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8]
- 20. <u>Initial Tests for F and SAM Emission Rates</u>: Initial compliance stack tests shall be conducted on each units exhaust flue gas within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup to determine the emission rates of SAM and F. Rules 62-4.070(3), 62-210.200 (BACT) and 62-212.400 (PSD), F.A.C.]
- 21. Subsequent Compliance Testing: Annual stack tests for each MWC units exhaust flue gas shall be conducted for VOC, HCl, PM/PM₁₀/PM_{2.5}, Pb, Cd, Hg (quarterly), D/F (quarterly during first two years of operation at the inlet and outlet of the SCR and stack flue exhaust and annually thereafter at the stack flue exhaust only), VE and ammonia slip during each federal fiscal year (October 1st to September 30th) to show compliance with the emission limits given in **Specific Condition 16** of this subsection. Data collected from the reference method during the required RATA tests for CO, NO_X, SO₂ and Hg (one quarter of four) may be used to satisfy the annual testing requirement provided the notification requirements and emission testing requirements for performance and compliance tests of this permit are satisfied.

 [Rules 62-297.310(7)(a) and (b), and 62-296.416, F.A.C., and 40 CFR 60.8 and 60.58b]
- 22. Emissions Limit Subject to Revision D/F: D/F emissions from each MWC shall not exceed the limitation stated Specific Condition 16 of this subsection. Stack acceptance testing and SCR inlet/outlet D/F destruction testing shall be performed quarterly on each MWC exhaust flue gas during the first two years of operation. The permittee shall provide a protocol for the SCR efficiency testing for review and approval by the Department ninety days prior to the commencement of testing. The permittee shall provide the results to the Department within 45 days of completion of the eight D/F destruction efficiency and stack tests so that the Department can set a numerical BACT D/F limit based on the performance of the SCR technology.
 - The D/F emission limit standard will be between a maximum value of 10 ng/dscm and a minimum value of 0.75 ng/dscm. Between these upper and lower limit values, the limit will be ten times the average of the eight quarterly D/F SCR efficiency and stack test results conducted during the first two years of PBREF-2 operation. For example, if the average of these tests is 0.50 ng/dscm then the limit will be set by the Department at 5.0 ng/dscm, while if the average of the stack tests is 1.2 ng/dscm then the limit will be set at the upper limit value of 10.0 ng/dscm.
 - If the D/F average emissions based on the SCR efficiency and stack tests is 0.05 ng/dscm or less, then the D/F emission limit shall be set at 0.74 ng/dscm as a non-PSD/BACT limit. The D/F emission limit shall be established prior to issuance of the facility's Title V operating permit.

 [40 CFR 60.52b(c); Rules 62-4.070(3), 62-210.200 (BACT) and 62-212.400 (PSD), F.A.C.]
- 23. Continuous Compliance: The permittee shall demonstrate continuous compliance with the CO, NO_X and SO₂ concentration and mass emission standards and the long-term Hg mass emissions standard based on data collected by the certified CEMS. The permittee shall demonstrate continuous compliance with the opacity limit based on data collected by the required COMS.

 [Rule 62-210.200 (BACT), F.A.C. and 40 CFR 60, Subpart Eb]

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

EXCESS EMISSIONS

{Permitting Note: Specific Conditions 24, 25 and 26 apply to the State Implementation Plan (SIP)-based emissions standards specified in Specific Condition 16 of this subsection. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS, or Acid Rain programs.}

- 24. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C. and Rule 62-4.070(3), F.A.C.]
- 25. Emission Limit Compliance and Excess Emissions: Because of the long-term nature of the 12-month NO_X and 12-month Hg concentration limits as part of PSD and the associated BACT determination, all emissions data for these pollutants/averaging times, including periods of startup, shutdown and malfunction, shall be included in compliance determinations based on CEMS data. [Rule 62-210.700(4), 62-210.200(PTE); [Rule 62-212.400(10) (PSD), Control Technology Review; and Rule 62-4.070(3), F.A.C.]
- 26. Excess Emissions Allowed: As specified in this condition, excess emissions resulting from startup, shutdown and documented malfunctions are allowed for the 24-hour NO_X and 30-day CO rolling concentration and mass limit provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. NO_X and CO emission data exclusions resulting from startup, shutdown, or documented malfunctions shall not exceed three hours in any 24-hour period. A "documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.
- 27. <u>Regulations Pursuant to 40 CFR 60, Subpart Eb</u>: The following provisions apply to the emissions limits given in **Specific Condition 16** of this subsection that were specified pursuant to 40 CFR 60, Subpart Eb.
 - a. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
 - b. Startup, Shutdown and Malfunction: Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Eb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)(iii). During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).
 - i. The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
 - ii. Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

[40 CFR 60.58b(a)]

c. Special Provisions for CO: For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. [40 CFR 60.58b(a)(1)(iii)]

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

CONTINUOUS MONITORING REQUIREMENTS

- 28. <u>CEM Systems</u>: The permittee shall install, calibrate, maintain, and operate CEMS to measure and record the emissions of CO, NO_X, Hg and SO₂ from each MWC unit in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards given in **Specific Condition 16** of this subsection. For additional details see Appendix CEMS of this permit.
 - a. CO CEMS: CO CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
 - b. NO_X CEMS: NO_X CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. The NO_X monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
 - c. SO₂ CEMS: SO₂ CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR 60. The SO₂ monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.
 - d. Hg CEMS: Hg CEMS shall be certified pursuant to the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor Phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. Changes from these standards with regard to data availability of the Hg CEMS are given in Appendix CEMS, along with the method to fill in data during times of Hg CEMS unavailability. After certification the owner or operator will begin reporting Hg concentration emissions data. The owner or operator shall adhere to the calibration drift and quarterly performance evaluation procedures and ongoing data quality assurance procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The mass emissions shall be estimated based on the actual data collected no later than 30 days following the end of the month. The mercury monitoring data results shall be submitted quarterly. The CEMS shall only be used as the method of compliance for the annual mass emission rate.
 - e. *Diluent Monitor:* A continuous emission monitoring system for measuring the oxygen content of the flue gas at each location where carbon monoxide, sulfur dioxide, nitrogen oxides emissions are monitored shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.58b.
- 29. <u>COMS</u>: A continuous opacity monitoring system (COMS) shall be installed, calibrated, operated, and maintained in exhaust flue of each MWC unit in a manner sufficient to demonstrate continuous compliance with the opacity standard specified in this section. Opacity shall be based on a 6-minute block average computed from at least one observation (measurement) every 15 seconds. For the COMS, the 6-minute block averages shall begin at the top of each hour. The COMS shall meet the applicable requirements of 40 CFR 60.58b(c)(8).
- 30. <u>Continuous Flow Monitor</u>: A continuous flow monitor shall be installed to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitor shall be certified pursuant to 40 CFR

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

60, Appendix B, Performance Specification 6. [Rules 62-210.200(BACT), 62-204.800(8), and 62-4.070(1) and (3), F.A.C.]

OTHER MONITORING REQUIREMENTS

- 31. <u>Pressure Drop</u>: The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across each baghouse compartment controlling the PM, sorbent and powdered activated carbon (PAC) emissions for each MWC unit. Records shall be maintained on site and made available upon request. [Rule 62-4.070(3), F.A.C.]
- 32. <u>Bag Leak Detection</u>: The permittee shall maintain continuous operation of bag leak detection systems on each baghouse for each MWC unit including keeping records of the systems measurements. Baghouse leak detection records shall be kept on site and made available upon request. [Rule 62-4.070(3), F.A.C.]
- 33. SCR NH₃ or Urea Injection: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a flow meter to measure and record the NH₃ or urea injection rate for the SCR system on each MWC unit. The permittee shall document the general range of NH₃ or urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with NH₃ or urea flow rates. During NO_X CEMS downtimes or malfunctions, the permittee shall operate at an NH₃ or urea flow rate that is consistent with the documented flow rate for the given load condition. Records shall be maintained on site and made available upon request. [Rule 62-4.070(3), F.A.C.]
- 34. Activated CI: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a mass flow meter or Department approved device to measure and record the activated CI rate (lb/hour) for each MWC unit. The permittee shall document the general range of activated CI mass flow rates required to meet the Hg standard over the range of load conditions by comparing Hg emissions with activated CI mass flow rates. During Hg CEMS downtimes or malfunctions, the permittee shall operate at the activated CI mass flow rate that is consistent with the documented flow rate for the given load condition. Records shall be maintained on site and made available upon request. [Rule 62-4.070(3), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

- 35. <u>Segregated Solid Waste Record Keeping</u>: The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of **Specific Condition 12** of this subsection:
 - a. Each segregated load of non-MSW materials, subject to the percentage weight limitations of **Specific Condition 12** of this subsection, which is received for processing, shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured and recorded using the facility truck scale.
 - b. Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
 - c. Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[Rules 62-4.070(1) and (3), and 62-210.200(BACT), F.A.C.]

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

- 36. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the specified in Rule 62-297:310(8), F.A.C. [Rule 62-297.310(8), F.A.C.]
- 37. Malfunction Notifications: If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction. [Rules 62-210.700(6) and 62-4.130, F.A.C.]
- 38. <u>SIP Quarterly Permit Limits Excess Emissions Report</u>: Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of CO and NO_X emissions in excess of the BACT permit standards and the amounts of authorized data excluded following the format in Appendix XSE of this permit. Periods of startup, shutdown and malfunction shall be monitored and recorded at all times. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter.
- 39. <u>Annual Operating Report</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370, F.A.C.]

B. Carbon and Lime Storage Silos (EU Nos. 027, 028, 029 and 030)

This section addresses the following EU.

E.U. ID No.	EU Descriptions	
027	Lime Storage Silo #A	
028	Lime Storage Silo #B	
029	Lime Storage Silo #C	
030	Activated Carbon Storage Silo	

EQUIPMENT AND CONTROL TECHNOLOGY

- 1. <u>Storage Silos</u>: The permittee is authorized to construct three lime storage silos and one activated carbon storage silo. Each silo will have a volume of approximately 9,000 to 11,000 cubic feet.
- 2. <u>FF Baghouses</u>: Each storage silo will be equipped with its own FF baghouse to control PM emissions. Each baghouse shall be designed, operated and maintained to achieve a PM mass emission rate of 0.01 grains per dry standard cubic foot (gr/dscf) or less. The baghouses shall be operated during all silo filling operations.

PERFORMANCE REQUIREMENTS AND EMISSION STANDARDS

- 3. <u>Hours of Operation</u>: These EU may operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.228(PTE), F.A.C.]
- 4. <u>FF Baghouse PM Emission Standard:</u> PM emissions from each storage silo baghouse shall not exceed 0.010 gr/dscf. [Application No. 0990234-017-AC; Rules 62-4.070(3), 62-212.400 (BACT), 62-210.200(PTE) and 62-4.070, F.A.C.]
- 5. FF Baghouse PM Standard by Opacity Measurement: A visible emission reading of 5% opacity or less may be used to demonstrate compliance with the PM emission standard in **Specific Condition 4** above. A visible emission reading greater than 5% opacity will require the permittee to perform a PM emissions stack test within 60 days to show compliance with the PM standard.

 [Application No. 2000234 017 ACC Pulses 62 206 603 62 206 713 62 4 070 and 62 213 400 (PACT)

[Application No. 0990234-017-AC; Rules 62-296.603; 62-296.712, 62-4.070 and 62-212.400 (BACT) F.A.C.; and 40 CFR 60.122(a)(2)]

{Permitting Note: The baghouses are designed to control PM emissions to 0.010 gr/dscf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of $PM/PM_{10}/PM_{2.5}$ for EU will be less than 0.1 TPY.}

- 6. <u>Fugitive Emissions Limits</u>: Fugitive emissions are limited to 10% opacity from any emissions point not controlled by a FF baghouse. [Rule 62-4.070(3), F.A.C.]
- 7. Best Management Practices to Control Unconfined Emissions of PM: To ensure the emission standards with regard to opacity and PM of this subsection are complied with, the procedures set forth in **Specific Condition 10** of **Section II** of this permit, "Unconfined Emissions of Particulate Matter," shall be adhered to where practical and cost effective.

[Application No. 0990234-017-AC; Rules 62-4.070, 62-296.320 and 62-212.400 (BACT) F.A.C.]

TESTING AND MONITORING REQUIREMENTS

8. <u>Compliance Demonstrations:</u> Each emission point shall be tested to demonstrate initial compliance with the emission standards for visible emissions given in **Specific Conditions 5 and 6** of this subsection in accordance with EPA Method 9. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup. Thereafter, compliance with the visible emission limits for each emission point shall be demonstrated during each federal fiscal year (October 1st to September 30th). As specified in Specific Condition 5 of this

B. Carbon and Lime Storage Silos (EU Nos. 027, 028, 029 and 030)

- subsection, a PM test must be conducted on a FF baghouse of a storage silos with 60 days of its failure in meeting the VE standard. [Rules 62-4.070(3), and 62-297.310(7)(a), F.A.C.]
- 9. <u>Test Methods</u>: Any required tests shall be performed in accordance with the following reference methods and the applicable requirements of Appendix CTR of this permit.

EPA Method	Description of Method and Comments	
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.	
9	Visual Determination of the Opacity of Emissions from Stationary Sources	

REPORTING AND RECORD KEEPING

- 10. <u>Baghouse O&M Plan</u>: For each baghouse the permittee shall prepare an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Compliance Authority prior to the initial compliance tests for these EU. [Rule 62-4.070(3), F.A.C.]
- 11. <u>Test Reports</u>: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

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

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 hp
032	One emergency diesel firewater pump engine with a maximum design rating of 250 hp

NSPS AND NESHAP APPLICABILITY

- 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]
- 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)]

EQUIPMENT 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 hp (186 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</u>: The permittee is authorized to construct a 1,000 gallon tank to store ULSD 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 emissions unit.}

[40 CFR 60.110b(a) and (c) and Rule 62-204.800(8)(b)(17), F.A.C.]

PERFORMANCE RESTRICTIONS

- 5. <u>Hours of Operation</u>: Each fire pump engine may operate up to 100 hours per year for maintenance and testing purposes. 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. <u>Authorized Fuel</u>: 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.]

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.]

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

Emergency Pumps	CO	PM	SO ₂ (% S) ²	NMHC ³ +NO _X
(175 hp ≤ and < 300 hp)	(g/hp-hr) ¹	(g/hp-hr)		(g/hp-hr)
Subpart IIII (2009 and later)	2.6	0.15	0.0015	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 pump engines with fuel sulfur (S) content of 0.0015% by weight.
- 3. Non-Methane Hydrocarbons

[Application No. 0990234-017-AC; 40 CFR 60, 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. [Rule 62-212.400 (BACT), F.A.C. and 40 CFR 60.4211]

D. Emergency Generator (EU-033)

This section of the permit addresses the following emissions units.

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

NSPS AND NESHAP APPLICABILITY .

- 1. NSPS Subpart IIII Applicability: This emergency generator is a Stationary Compression Ignition Internal 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 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines]
- 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 Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)]

EQUIPMENT

- 3. <u>Emergency Generator</u>: The permittee is authorized to install, operate and maintain one emergency generator with a maximum design rating of 250 kW (335 hp) 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</u>: The permittee is authorized to construct a 1,000 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(8)(b)(17), F.A.C.]

PERFORMANCE RESTRICTIONS

- 5. 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. 0990234-017-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.
 [Application No. 0990234-017-AC and Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]

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.

D. Emergency Generator (EU-033)

Emergency Generator	CO	PM	SO ₂ ²	NMHC ³ +NO _X
(225 kW ≤ and < 450 kW)	(g/kW-hr) ¹	(g/kW-hr)	(% S)	(g/kW-hr)
Subpart IIII (2007 and later)	3.5	0.20	0.0015	4.0

- 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. <u>Notification, Recordkeeping and Reporting Requirements</u>: 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]

E. Ash Handling System and Building (EU No. 034)

This section of the permit addresses the following EU.

EU ID No.	Emission Unit Description	
034	Ash Handling System and Building	

EQUIPMENT

- 1. <u>Ash Handling Building</u>: The permittee is authorized to install, operate, and maintain the ash handling system and building for handling bottom ash from the MWC units and fly ash from the FF baghouses.
- 2. <u>Enclosed Conveyor System</u>: The permittee is authorized to construct an enclosed conveyor system to transport collected ash from the boiler and air pollution control buildings to the ash management building.
- 3. <u>Ash Processing Equipment</u>: Within the ash handling building, the permittee is authorized to construct ash processing equipment including ferrous and non-ferrous recovery systems.
- 4. <u>FF Baghouse</u>: To minimize particulate matter emissions from the ash handling equipment, the permittee shall construct a FF baghouse through which air from the ash handling building will be routed to prior to discharge to the atmosphere.

{Permitting Note: To minimize fugitive particulate matter emissions from the ash handling equipment, ash (bottom and fly) will be wetted to a moisture content of approximate of 20 to 25 percent.}

[Applicant Request and Rule 62-210.200(PTE), F.A.C.]

EMISSIONS AND PERFORMANCE REQUIREMENTS

- 5. Fugitive Ash Emissions:
 - (a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of Subpart A, no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c) below.
 - (b) The emission limit specified in (a) above does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in (a) above does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.
 - (c) The provisions of (a) above do not apply during maintenance and repair of ash conveying systems. [40 CFR 60.36b and 40 CFR 60.55b]
- 6. <u>Testing for Fugitive Ash Emissions:</u> The procedures specified in (1) through (4) below shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.
 - (1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
 - (2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.
 - (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.
 - (4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a

E. Ash Handling System and Building (EU No. 034)

performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

[40 CFR 60.38b and 40 CFR 60.58b(k)]

- 7. Ash Handling FF Baghouse PM Emission Standard: PM emissions from the baghouse of the ash handling building shall not exceed 0.010 gr/dscf. [Rules 62-4.070(3), 62-212.400 (BACT), 62-210.200(PTE) and 62-4.070, F.A.C.]
- 8. <u>Baghouse PM Standard by Opacity Measurement</u>: A visible emission reading of 5% opacity or less may be used to demonstrate compliance with the PM emission standard in **Specific Condition 7** above. A visible emission reading greater than 5% opacity will require the permittee to perform a PM emissions stack test within 60 days to show compliance with the PM standard. [Rules 62-296.712, 62-4.070 and 62-212.400 (BACT) F.A.C.]

TESTING AND MONITORING REQUIREMENTS

- 9. <u>Initial Compliance Tests</u>: The bottom and fly ash conveyors, transfer points, drop points, hoppers, chutes and dust collectors associated with this emission unit shall be tested to demonstrate initial compliance with the VE standards specified in **Specific Condition 5** of this subsection. The ash handling building FF baghouse shall be tested to demonstrate initial compliance with the VE standard specified in **Specific Condition 8** of this subsection. The initial tests shall be conducted within 180 days after initial operation. [Rules 62-297.310(7)(a)1., F.A.C. and 62-4.070(3), F.A.C.]
- 10. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), the bottom and fly ash conveyors, transfer points, drop points, hoppers, chutes and dust collectors associated with this emission unit shall be tested to demonstrate compliance with the VE emissions standards specified in **Specific**Condition 5 of this subsection. During each federal fiscal year (October 1st to September 30th), the ash handling building FF baghouse shall be tested to demonstrate compliance with the VE emissions standard specified in **Specific Condition 8** of this subsection.

 [Rules 62-297.310(7)(a)4, 62-212.400 (BACT) and 62-4.070(3), F.A.C.]
- 11. Ash Handling Building FF Baghouse PM Compliance Test: The initial and annual VE tests in **Specific**Conditions 9 and 10 of this subsection with regard to the ash handling building FF baghouse shall serve as a surrogate for the PM emissions tests. If the VE emissions standard in **Specific Condition 8** of this subsection is not met for the ash handling building FF baghouse, a PM test utilizing EPA Method 5 must be conducted on the baghouse stack to show compliance with the PM emissions standard in **Specific Condition 7** of this subsection within 60 days. [Rule 62-297.620(4), F.A.C.]
- 12. <u>Bag Leak Detection</u>: The permittee shall maintain continuous operation of bag leak detection systems, including records, on the ash handling building FF baghouse. Baghouse leak detection records shall be kept on site and made available upon request. [Rule 62-4.070(3), F.A.C.]
- 13. Test Methods: Any required tests shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments		
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.		
22	Fugitive Opacity		

E. Ash Handling System and Building (EU No. 034)

R	Œ	\mathbf{CC}	RI	2.0	Αľ	UN	R	EΡ	വ	R	T	S
т.		-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,	Δ	11	_1		v			v

14.	Test Reports: The permittee shall prepare and submit reports for all required tests in according	dance with the
	requirements specified in Appendix CTR (Common Testing Requirements) of this permit.	For each test run
	the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]	

SECTION 4. APPENDICES

CONTENTS

The following Appendices are part of this permit and the permittee must comply with the requirements of each appendix.

Appendix A Identification of General Provisions - NSPS 40 CFR 60, Subpart A;

Appendix A1 General Provisions - NSPS 40 CFR 63, Subpart A;

Appendix CC Common Conditions;

Appendix CEMS Continuous Emissions Monitoring System (CEMS) Requirements;

Appendix CF Citation Formats and Glossary of Common Terms;

Appendix CTR Common Testing Requirements;

Appendix Eb NSPS, 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste

Combustors;

Appendix GC General Conditions;

Appendix IIII NSPS, 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression

Ignition Internal Combustion Engines;

Appendix XSE Excess Emission Reporting Form; and,

Appendix ZZZZ NESHAP, 40 CFR 63, Subpart ZZZZ – Stationary Reciprocating Internal Combustion

Engines.

SECTION 4. APPENDIX A

NSPS SUBPART A – GENERAL PROVISIONS

The owner or operator of PBREF-2 shall comply with all applicable provisions of 40 CFR 60 Subpart A, which is available at the following link:

Link to NSPS Subpart A

SECTION 4. APPENDIX A1

NESHAP SUBPART A – GENERAL PROVISIONS

The owner or operator of PBREF-2 shall comply with all applicable provisions of 40 CFR 63 Subpart A, which is available at the following link:

Link to NESHAP Subpart A

SECTION 4. APPENDIX CC

COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the PBREF-2.

EMISSIONS AND CONTROLS

- 1. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

 [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- 8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

SECTION 4. APPENDIX CC

COMMON CONDITIONS

[Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

- 10. <u>Records Retention</u>: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
- 11. Emissions Computation and Reporting:
 - a. Applicability. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.
 - b. Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (2) Continuous Emissions Monitoring System (CEMS).
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

COMMON CONDITIONS

- 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
- (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - 1) A calibrated flowmeter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
 - (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

- a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

COMMON CONDITIONS

- The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.
- c. Annual Operating Report for Air Pollutant Emitting Facility
 - (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - (a) All Title V sources.
 - (b) All synthetic non-Title V sources.
 - (c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - (d) All facilities for which an annual operating report is required by rule or permit.
 - (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
 - (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year.
 - (4) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

[RULE 62-210.370, F.A.C.]

SECTION 4. APPENDIX CEMS

CONTINUOUS EMISSIONS MONITORING (CEMS) REQUIREMENTS

The following conditions apply to all CEMS at the PBREF-2.

CEMS OPERATION PLAN

1. <u>CEMS Operation Plan</u>: The owner or operator shall create and implement a facility-wide plan for the proper installation, calibration, maintenance and operation of each CEMS required by this permit. The owner or operator shall submit the CEMS Operation Plan to the Bureau of Air Monitoring and Mobile Sources for approval at least 60 days prior to CEMS installation. The CEMS Operation Plan shall become effective 60 days after submittal or upon its approval. If the CEMS Operation Plan is not approved, the owner or operator shall submit a new or revised plan for approval.

{Permitting Note: The Department maintains both guidelines for developing a CEMS Operation Plan and example language that can be used as the basis for the facility-wide plan required by this permit. Contact the Emissions Monitoring Section of the Bureau of Air Monitoring and Mobile Sources at (850)488-0114.}

INSTALLATION, PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE

2. Timelines:

- a. New and Existing Emission Units. For new emission units, the owner or operator shall install each CEMS required by this permit prior to initial startup of the unit. The owner or operator shall conduct the appropriate performance specification for each CEMS within 90 operating days of achieving permitted capacity as defined in Rule 62-297.310(2), F.A.C., but no later than 180 calendar days after initial startup.
- 3. <u>Installation</u>: All CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The owner or operator shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR part 60, Appendix B.
- 4. <u>Span Values and Dual Range Monitors</u>: The owner or operator shall set appropriate span values for the CEMS. The owner or operator shall install dual range monitors if required by and in accordance with the CEMS Operation Plan.
- 5. <u>Continuous Flow Monitor</u>: For compliance with mass emission rate standards, the owner or operator shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR part 60, Appendix B, Performance Specification 6.
- 6. <u>Diluent Monitor</u>: If it is necessary to correct the CEMS output to the oxygen concentrations specified in this permit's emission standards, the owner or operator shall either install an oxygen monitor or install a carbon dioxide (CO₂) monitor and use an appropriate F-Factor computational approach.
- 7. <u>Moisture Correction</u>: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).
 - {Permitting Note: The CEMS Operation Plan will contain additional CEMS-specific details and procedures for installation.}
- 8. <u>Performance Specifications</u>: The owner or operator shall evaluate the acceptability of each CEMS by conducting the appropriate performance specification, as follows. CEMS determined to be unacceptable shall not be considered installed for purposes of meeting the timelines of this permit.
 - a. <u>SO₂ CEMS</u>: The SO₂ CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 60, Appendices A and F.
 - b. <u>CO Monitors</u>: For CO monitors, the owner or operator shall conduct Performance Specification 4 or 4A of 40 CFR part 60, Appendix B.

SECTION 4. APPENDIX CEMS

CONTINUOUS EMISSIONS MONITORING (CEMS) REQUIREMENTS

- c. <u>NO_X Monitor</u>: For a NO_X monitor, the owner or operator shall conduct Performance Specification 2 of 40 CFR part 60, Appendix B.
- d. <u>Hg Monitor</u>: The Hg CEMS shall be certified pursuant to the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program.
- e. <u>COMS</u>: In accordance with 40 CFR 60.48b(a) the permittee shall install, calibrate, operate and maintain a continuous opacity monitor (COM) to continuously monitor and record opacity from the steam generating unit. The COMS shall be certified pursuant to 40 CFR 60 Appendix B, Performance Specification 1.
- 9. Quality Assurance: The owner or operator shall follow the quality assurance procedures of 40 CFR part 60, Appendix F.
 - a. <u>CO Monitors</u>: The required relative accuracy test audit (RATA) tests shall be performed using EPA Method 10 in Appendix A of 40 CFR part 60 and shall be based on a continuous sampling train.
 - b. <u>NO_X Monitors</u>: The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR part 60. NO_X shall be expressed "as NO₂."
 - c. <u>SO₂ Monitors</u>: The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR part 60.
 - d. <u>Hg Monitors</u>: After certification the owner or operator will begin reporting Hg concentration emissions data. The owner or operator shall adhere to the calibration drift and quarterly performance evaluation procedures and ongoing data quality assurance procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The mass emissions shall be estimated based on the actual data collected no later than 10 days following the end of the month. The mercury monitoring data results shall be submitted quarterly. The CEMS shall only be used as the method of compliance if the owner or operator, at a minimum, meets the requirements of 40 CFR 60.58b(n). Prior to use of the Hg-CEMS as the method to demonstrate compliance, the owner or operator shall submit written notice to the Department, and receive approval for missing data substitution and a data calculation approach plans.
- 10. <u>Substituting RATA Tests for Compliance Tests</u>: Data collected during CEMS quality assurance RATA tests can substitute for annual stack tests, and vice versa, at the option of the owner or operator, provided the owner or operator indicates this intent in the submitted test protocol and follows the procedures outlined in the CEMS Operation Plan.

CALCULATION APPROACH

- 11. <u>CEMS Used for Compliance</u>: Once adherence to the applicable performance specification for each CEMS is demonstrated, the owner or operator shall use the CEMS to demonstrate compliance with the long term 12 month rolling mean emission limits for NO_x, SO₂, CO and Hg emission standards as specified by this permit.
- 12. <u>CEMS Data</u>: Each CEMS shall monitor and record emissions during all periods of operation and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments and span adjustments, and except for allowable data exclusions/substitution as per **Specific Condition 19** of this appendix.

SECTION 4. APPENDIX CEMS

CONTINUOUS EMISSIONS MONITORING (CEMS) REQUIREMENTS

- 13. Operating Hours and Operating Days: For purposes of this appendix, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Unless otherwise specified by this permit, any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
- 14. <u>Valid Hourly Averages</u>: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
 - a. Hours that are not operating hours are not valid hours.
 - b. For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."
- 15. <u>Calculation Approaches</u>: The owner or operator shall implement the calculation approach specified by this permit for each CEMS, as follows:
 - a. Rolling12-month average, rolled monthly: Compliance shall be determined after each operating month by calculating the arithmetic average of all the valid hourly averages from that operating month and the prior 11 operating months.
 - b. Rolling 30-day average: Compliance shall be determined after each operating day by calculating the arithmetic average of all the valid hourly averages from that operating day and the prior 29 operating days.

MONITOR AVAILABILITY

- 16. NO_x, SO₂ and CO CEMS Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for each CEMS, other than the Hg CEMS, shall be 95% or greater in any calendar quarter in which each unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.
- 17. <u>Initial Hg CEMS Availability</u>: During the initial four quarters of operation, the quarterly excess emissions report shall identify Hg CEMS availability for each calendar quarter in which the unit is operated. Monitor availability for the Hg CEMS shall be 80% or greater in any of the initial four calendar quarters in which the unit operated for more than 760 hours. In the event the availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 80% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.
- 18. <u>Subsequent Hg CEMS Availability</u>: During subsequent calendar quarters of operation, the Hg CEMS availability shall be 85% or greater in any calendar quarter in which the unit is operated for more than 760 hours. The reporting and corrective actions along with actions that shall be considered violations of this permit are specified in **Specific Condition 17** of this appendix.

SECTION 4. APPENDIX CEMS

CONTINUOUS EMISSIONS MONITORING (CEMS) REQUIREMENTS

19. Hg CEMS Unavailability Data Replacement: During times of Hg CEMS unavailability, emission data for mass emission compliance purposes shall be estimated from an Hg emission factor based on the steam production during the time of Hg CEMS availability. The pounds of Hg emitted during the time of Hg CEMS availability shall be divided by the million tons of steam produced during this same timeframe to develop an Hg emission factor of pounds Hg per million tons of steam (lb-Hg/MTS). This emission factor shall then be used during the time of Hg CEMS unavailability to estimate Hg emissions for mass emission limit compliance purposes. This emission factor shall be multiplied by the million tons of steam produced while the Hg CEMS was unavailable to estimate the mass of Hg emitted during this timeframe. The estimated Hg mass emission value shall then be added to the Hg mass emission value calculated during the time of Hg CEMS availability to determine if the Hg mass emission limit of 113 pounds on a 12 month rolling average basis has been met.

EXCESS EMISSIONS

20. Definitions:

- a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown means the cessation of the operation of an emissions unit for any purpose.
- c. Malfunction means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- 21. <u>Excess Emissions Prohibited</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
- 22. <u>Data Exclusion Procedures for SIP Compliance</u>: As per the procedures in this condition, limited amounts of CEMS emissions data may be excluded from the corresponding compliance demonstration, provided that best operational practices to minimize emissions are adhered to and the duration of data excluded is minimized. The data exclusion procedures of this condition apply only to SIP-based emission limits.
 - a. Excess Emissions. Data in excess of the applicable emission standard may be excluded from compliance calculations if the data are collected during periods of permitted excess emissions (for example, during startup, shutdown or malfunction). The maximum duration of excluded data is 2 hours in any 24-hour period, unless some other duration is specified by this permit. For the CEMS on the thermal oxidizer (TO) exhaust stack, mass based excess emissions of NO_x, CO, SO₂ and Hg during periods of startup, shutdown and malfunction cannot be excluded. This is due to the long term nature (12 month rolling) of the emission limits.
 - b. Limited Data Exclusion. If the compliance calculation using all valid CEMS emission data, as defined in Condition 12 of this appendix, indicates that the emission unit is in compliance, then no CEMS data shall be excluded from the compliance demonstration.
 - c. Event Driven Exclusion. The underlying event (for example, the startup, shutdown or malfunction event) must precede the data exclusion. If there is no underlying event, then no data may be excluded. Only data collected during the event may be excluded.
 - d. Reporting Excluded Data. The data exclusion procedures of this condition are not necessarily the same procedures used for excess emissions as defined by federal rules. Quarterly or semi-annual reports required by this permit shall indicate not only the duration of data excluded from SIP compliance calculations but also the number of excess emissions as defined by federal rules.

SECTION 4. APPENDIX CEMS

CONTINUOUS EMISSIONS MONITORING (CEMS) REQUIREMENTS

23. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate noncompliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. For malfunctions, notification is sufficient for the owner or operator to exclude CEMS data.

ANNUAL EMISSIONS

- 24. <u>CEMS Used for Calculating Annual Emissions</u>: All valid data, as defined in Condition 12 of this appendix, shall be used when calculating annual emissions.
 - a. Annual emissions shall include data collected during startup, shutdown and malfunction periods.
 - b. Annual emissions shall include data collected during periods when the emission unit is not operating but emissions are being generated (for example, when firing fuel to warm up a process for some period of time prior to the emission unit's startup).
 - c. Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit or relative accuracy audit (RAA). These periods of time shall be considered missing data for purposes of calculating annual emissions.
 - d. Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered missing data for purposes of calculating annual emissions.
- 25. Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average. For each hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the owner or operator shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.
- 26. <u>Emissions Calculation</u>: Hourly emissions shall be calculated for each hour as the product of the 1-hour block average and the duration of pollutant emissions during that hour. Annual emissions shall be calculated as the sum of all hourly emissions occurring during the year.

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of

Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX CF

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System

(Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DEP: Department of Environmental Protection

Department: Department of Environmental

Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

F: fluoride

ft²: square feet

ft³: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for

Hazardous Air Pollutants

NO_x: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic

diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen

oxides) ·

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate

system

VE: visible emissions

SECTION 4. APPENDIX CF

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

VOC: volatile organic compounds

Application

PBREF-2: Palm beach Renewable Energy Facility Number 2

TO: Thermal Oxidizer

Snygas: synthetic gas

HRSG: heat recovery steam generators

STG: Steam Turbine Electrical Generator

CEMS: continuous emissions monitoring system

COMS: continuous opacity monitoring system

SECTION 4. APPENDIX CTR

COMMON TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the PBREF-2.

COMPLIANCE TESTING REQUIREMENTS

- 1. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- 2. Applicable Test Procedures Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(57)(ka)(10)(c), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4), F.A.C.]

3. Determination of Process Variables

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

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

- 4. <u>Frequency of Compliance Tests</u>: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - a. General Compliance Testing.

SECTION 4. APPENDIX CTR

COMMON TESTING REQUIREMENTS

- 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
- 2. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision.

In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit other than the emergency flare system (EU 003)that, during the year prior to renewal:

- (a) Did not operate; or
- (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
- 3. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for visible emissions, if there is an applicable standard.
- 4. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- b. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

- 5. <u>Test Reports</u>: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.
 - a. The type, location, and designation of the emissions unit tested.
 - b. The facility at which the emissions unit is located.
 - c. The owner or operator of the emissions unit.
 - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

SECTION 4. APPENDIX CTR

COMMON TESTING REQUIREMENTS

- f. The date, starting time and end time of the observation.
- g. The test procedures used.
- h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.
- i. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
- j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX Eb

NSPS, 40 CFR 60, SUBPART EB – STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS STEAM GENERATING UNITS

Applicability of 40CFR60, Subpart Eb- Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996.

The proposed PBREF-2 is a new Large Municipal Waste Combustor (Large MWC) because it is a waste combustion unit that is capable of combusting more than 250 tons per day (TPD) of municipal solid waste (MSW).

The rules applicable to Large MWC's are given at 40CFR60, Sections 60.50b through 60.59b. More specifically, the PBREF-2 utilizes combustion of MSW to generate electrical power. The emission limits applicable to this category of MWC are specified by in the relevant sections, paragraphs and tables that address individual pollutants including CO, NO_X, SO₂, HCl, PM, dioxin/furan, opacity, Cd, Hg, Pb, and various emission monitoring and operational parameters.

The Department has insured that the Permit is at least as stringent, and in several case much more stringent, than the requirements of Subpart Eb, including the use of Hg-CEMS.

A link to 40 CFR 60, Subpart Eb is available below.

Link to NSPS Subpart Eb

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - a. Determination of Best Available Control Technology ();
 - b. Determination of Prevention of Significant Deterioration (); and
 - c. Compliance with New Source Performance Standards (X).
- 14. The permittee shall comply with the following:.
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX IIII

NSPS, 40 CFR 60, SUBPART IIII - STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES

A 250 kW or less emergency generator (EU ID 033) and two 250 hp or less fire pump (EU IDs 031 and 032) are proposed for the PBREF-2 and are subject to the applicable requirements of 40 CFR 60, Subpart IIII--Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The provisions of this Subpart may be provided in full upon request and are also available at the following link:

Link to NSPS Subpart IIII

SECTION 4. APPENDIX XSE

EXCESS EMISSIONS REPORTING FORM

QUARTERLY EXCESS EMISSIONS AND MONITORING REPORT FOR SIP-ONLY STANDARDS

Company:	
Plant Name:	
Address:	
Emissions Unit No Description:	
Pollutant (check one): CO NOX Emission Limitation:	
Reporting period: Q1 (Jan. – March) Q2 (April –	
Monitor Manufacturer:	
Model No.:	
Date of Latest CEMS Certification or Audit:	
Total emissions unit operating time in reporting period 1: hours	
Excluded Emission Data Summary 1	CEMS Performance Summary 1,5
1. Duration of excluded emissions due to: a. ST Cold Startup b. Shutdown c. Documented Malfunction d. Total Authorized Data Excluded 2. Total duration of excluded emissions x (100%) [Total source operating time] 3. Number of Compliance Averages > Limit 3	1. CEMS downtime due to: a. Monitor equipment malfunctions b. Non-Monitor equipment malfunctions c. Quality assurance calibration d. Other known causes e. Unknown causes 2. Total CMS Downtime 3. Total CEMS Downtime x (100%) [Total source operating time] %4
	6 and the corrective actions planned for the next quarter. 6 equipment or control equipment since the last quarterly report. 6 curate, and complete.
Signature:	Date:

SECTION 4. APPENDIX ZZZZ

NESHAP, 40 CFR 63, SUBPART ZZZZ - STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

A 250 kW or less emergency generator (EU ID 033) and two 250 hp or less fire pump (EU IDs 031 and 032) are proposed for the PBREF-2 and are subject to the applicable requirements of 40 CFR 63, Subpart ZZZZ--National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The complete provisions of Subpart ZZZZ may be provided in full upon request and are also available beginning at Section 63.6580 at:

Link to NESHAP Subpart ZZZZ

Walker, Elizabeth (AIR)

From:

Walker, Elizabeth (AIR)

Sent:

Thursday, December 23, 2010 4:41 PM

To:

'mhammond@swa.org'

Cc:

Halpin, Mike; Claridge, Kevin; 'James_Stormer@doh.state.fl.us';

'abrams.heather@epamail.epa.gov'; 'dee morse@nps.gov'; 'achattopadhyay@pirnie.com';

'sierra887@gmail.com'; Gibson, Victoria; Linero, Alvaro; Bull, Robert

Subject: Attachments: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

signature pages.pdf

Tracking:

Recipient

Delivery

'mhammond@swa.org'

Halpin, Mike Claridge, Kevin Delivered: 12/23/2010 4:41 PM

Delivered: 12/23/2010 4:41 PM

'James_Stormer@doh.state.fl.us'
'abrams.heather@epamail.epa.gov'

'dee_morse@nps.gov'

'achattopadhyay@pirnie.com'

'sierra887@gmail.com'

Gibson, Victoria Linero, Alvaro Delivered: 12/23/2010 4:41 PM

Delivered: 12/23/2010 4:41 PM

Bull, Robert

Delivered: 12/23/2010 4:41 PM

Dear Sir/ Madam:

Attached is the official **Notice of Final 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).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0990234.017.AC.F pdf.ZIP

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

Project Number: 0990234-017-AC /PSD-FL-413

Permit Status: FINAL

Permit Activity: CONSTRUCTION - Palm Beach Renewable Energy Facility No. 2

Facility County: PALM BEACH

The Bureau of Air Regulation 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.

Project documents that are 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, Bureau of Air Regulation at (850)488-0114.

Elizabeth Walker
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9505

Walker, Elizabeth (AIR)

From:

postmaster@swa.org

To:

Mark Hammond

Sent:

Thursday, December 23, 2010 4:42 PM

Subject:

Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

Your message has been delivered to the following recipients:

Mark Hammond

Subject: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

Walker, Elizabeth (AIR)

From:

Chattopadhyay, Amit [AChattopadhyay@pirnie.com]

Sent:

Saturday, December 25, 2010 12:18 PM

To:

Walker, Elizabeth (AIR)

Subject:

RE: SOLID WASTE AUTHORITY OF PBC/NCRRF: 0990234-017-AC/PSD-FL-413

Happy Holidays:

Access to the documents have been verified.

Amit Chattopadhyay

From: Walker, Elizabeth (AIR) [Elizabeth.Walker@dep.state.fl.us]

Sent: Thursday, December 23, 2010 4:41 PM

To: mhammond@swa.org

Cc: Halpin, Mike; Claridge, Kevin; James Stormer@doh.state.fl.us; abrams.heather@epamail.epa.gov;

dee morse@nps.gov; Chattopadhyay, Amit; sierra887@gmail.com; Gibson, Victoria; Linero, Alvaro; Bull, Robert

Subject: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

Dear Sir/ Madam:

Attached is the official **Notice of Final 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).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0990234.017.AC.F pdf.ZIP

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

Project Number: 0990234-017-AC /PSD-FL-413

Permit Status: FINAL

Permit Activity: CONSTRUCTION - Palm Beach Renewable Energy Facility No. 2

Facility County: PALM BEACH

The Bureau of Air Regulation 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.

Project documents that are 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, Bureau of Air Regulation at (850)488-0114.

Elizabeth Walker
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9505

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Mimi Drew is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

Walker, Elizabeth (AIR)

From:

Sandra Vassalotti [svassalotti@swa.org] on behalf of Mark Hammond [mhammond@swa.org]

Sent:

Monday, December 27, 2010 4:02 PM

To:

Walker, Elizabeth (AIR)

Subject:

RE: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

This is confirmation that we received the documents and accessed them.

Mark Hammond

From: Walker, Elizabeth (AIR) [mailto:Elizabeth.Walker@dep.state.fl.us]

Sent: Thursday, December 23, 2010 4:41 PM

To: Mark Hammond

Cc: Halpin, Mike; Claridge, Kevin; James Stormer@doh.state.fl.us; abrams.heather@epamail.epa.gov;

dee morse@nps.gov; achattopadhyay@pirnie.com; sierra887@qmail.com; Gibson, Victoria; Linero, Alvaro; Bull, Robert

Subject: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-017-AC/PSD-FL-413

Dear Sir/ Madam:

Attached is the official **Notice of Final 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).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990234.017.AC.F_pdf.ZIP

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

Project Number: 0990234-017-AC /PSD-FL-413

Permit Status: FINAL

Permit Activity: CONSTRUCTION - Palm Beach Renewable Energy Facility No. 2

Facility County: PALM BEACH

The Bureau of Air Regulation 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.

Project documents that are 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, Bureau of Air Regulation at (850)488-0114.

Elizabeth Walker
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9505

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Mimi Drew is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.