Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE

Solid Waste Authority of Palm Beach County
North County Regional Resource Recovery Facility

Authorized Representative:
Mr. Mark Hammond, Executive Director

Final Permit No. 0990234-021-AC/PSD-FL-108J
Air Construction Permit Revision -
Miscellaneous Revisions
Expires: January 20, 2015
Palm Beach County, Florida

PROJECT

This is the final air construction permit, which revises PSD-FL-108A and Permit No. 0990234-015-AC/PSD-FL-108H for Municipal Solid Waste Combustor Units 1 and 2. Revisions are made to other miscellaneous PSD permit conditions. This facility is an existing municipal waste combustor plant categorized under Standard Industrial Classification No. 4953. This existing plant is located in Palm Beach County at 7501 North Jog Road, West Palm Beach; UTM Coordinates: Zone 17, 585.82 km East and 2960.474 km North; Latitude: 26° 45' 53" North and Longitude: 80° 08' 12" West.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions). 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.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is <u>not</u> subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the 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
Electronically Signed

JFK/sa/sms/ejs

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 Revision) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Mark Hammond, SWA: mhammond@swa.org
Ms. Marybeth Morrison, SWA: mmorrison@swa.org
Mr. Manuel Hernandez, P.E., CDM: hernandezmj@cdm.com
Mr. David Dee, Young van Assenderp, P.A.: ddee@yvlaw.net
Mr. Lennon Anderson, P.E., DEP Southeast District Office: lennon.anderson@dep.state.fl.us
Mr. James Stormer, PBCHD: james_stormer@doh.state.fl.us
Ms. Cindy Mulkey, DEP Siting Office: cindy.mulkey@dep.state.fl.us
Ms. Heather Ceron, U.S. EPA Region 4: ceron.heather@epa.gov
Ms. Katy R. Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: oquendo.ana@epa.gov
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)
Ms. Lynn Scearce, DEP OPC: lynn.scearce@dep.state.fl.us (for reading file)

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.
Electronically Signed

FACILITY DESCRIPTION

This existing facility is a municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). The facility burns processed MSW that is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2,000 TPD of incoming MSW. The boiler plant includes two Babcock & Wilcox (B&W) boilers (Nos. 1 and 2) with auxiliary burners. Each boiler was designed with a maximum heat input of 427.5 MMBtu/hr and a maximum steam production rating of 324,000 lbs/hour. At a reference heating value of 5,700 Btu/lb, this is equivalent to 900 TPD of RDF per boiler. The gross nominal electric generating capacity of the facility is 62 megawatts (MW).

Two landfills, a Class I Landfill and a Class III Landfill, each with its own gas collection system and flare are located at the facility. Additional activities at the facility include: a composting facility, material processing systems, a metals recovery system, storage and handling systems for RDF; lime storage and processing facilities; storage and handling systems for ash and ash treatment; and, cooling towers. A biosolids pelletization facility (BPF) is located adjacent to the existing landfill.

The facility is owned by the Solid Waste Authority and operated by Palm Beach Resource Recovery Corporation, a subsidiary of Babcock and Wilcox Corporation.

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

FACILITY REGULATORY CLASSIFICATION

- This facility is a major source of hazardous air pollutants (HAP).
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

PROPOSED PROJECT

As part of the project for the Title V air operation permit revision (Project No. 0990234-022-AV), the applicant requested a concurrent air construction permit revision to change several underlying construction permit conditions found in two PSD permits.

SECTION 2. PERMIT REVISIONS

The following permit conditions and emissions unit description are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text.

This facility has MWC (municipal waste combustor) type emissions units that are subject to the emission standards and limitations under the May 10, 2006 federal amendments to the 40 CFR 60 Subparts Cb/Eb.

1st Permit Being Modified: PSD-FL-108A
Affected Emissions Units: Municipal Solid Waste Boiler Nos. 1 and 2 (E.U. ID Nos. 001 & 002)

The affected Specific Condition Nos. 3.l. and 4. from PSD-FL-108A are hereby changed as follows (the remainder of the permit remains unchanged as a result of this permitting action):

Specific Condition No. 3.l.

3.l. Dioxins/Furans: Emissions of total (tetra thru octa-chlorinated dibenzo-p dioxins and dibenzofurans) shall not exceed ~~60~~ 30 ng/dscm at 7% O_2.

Specific Condition No. 4.

~~4. Each unit shall be tested within 180 days of issuance of this permit, and annually thereafter, to demonstrate compliance with emission standards mentioned in specific condition No. 3, using the following EPA test methods contained in 40 CFR 60, Appendix A and in accordance with F.A.C. Section 17-2.700:~~

4. Each unit shall be tested within 180 days of issuance of this permit to demonstrate compliance with emission standards for all pollutants mentioned in specific condition No. 3. Thereafter, testing shall occur on a calendar year basis, (no less than 9 calendar months and no more than 15 calendar months following the previous performance test for Particulate Matter, NO_X, Carbon Monoxide, Lead, Mercury, Cadmium, SO_2, Opacity and Dioxins/Furans. Five performance tests must be completed in each 5-year calendar period).

The owner or operator shall conduct a performance test for Hydrogen Chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).

Compliance with the VOC limit shall be demonstrated by compliance with ~~the~~ both Carbon Monoxide limits in lieu of stack testing, but should the Department feel the VOC limit is not being met, a special compliance test could be required.

The required tests shall be performed using the following EPA test methods contained in 40 CFR 60, Appendix A and in accordance with Rule 62-297, F.A.C.:

2nd Permit Being Modified: Permit No. 0990234-015-AC/PSD-FL-108H
Affected Emissions Units: Municipal Solid Waste Boiler Nos. 1 and 2 (E.U. ID Nos. 001 & 002)

The affected Specific Condition Nos. III.A.11.; III.A.16.; and, III.A.17.b. in Permit No. 0990234-015-AC/PSD-FL-108H are hereby changed as follows (the remainder of the permit remains unchanged as a result of this permitting action) The activated carbon silo shall be included in the Title V permit revision as an insignificant emissions unit:

Specific Condition No. III.A.11.

A.11. Activated Carbon Silo Baghouse: Reserved. ~~Visible emissions from the baghouse vent on the activated carbon silo shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]~~

Specific Condition No. III.A.16.

A.16. Activated Carbon Silo Baghouse: Reserved. ~~In accordance with EPA Method 9, the permittee shall conduct initial and annual compliance tests to demonstrate compliance with the visible emissions standard. Initial tests shall be conducted when the activated carbon silo is initially loaded. Annual tests shall be conducted during each fiscal year (October 1st to September 30th). Each test shall be conducted for at least 30~~

~~minutes or for the complete loading cycle if less than 30 minutes. The permittee shall notify the Compliance Authority at least 15 days prior to the schedule compliance test date. Test reports shall be submitted within 45 days of completing the test. I addition to the information required in Rule 62-297.310(8), F.A.C., each test report shall include the activated carbon loading rate, the total amount of activated loaded and the line pressure for pneumatic loading. [Rules 64-4.070(3), 62-297.310(7) and 62-297.310(8), F.A.C.]~~

Specific Condition No. III.A.17.b.

A.17. MSWC Units 1 and 2: The permittee shall conduct initial compliance test on MSWC units 1 and 2 using the test methods and procedures described in the current Title V air operation permit.

a. Within 60 days of completing construction of each new combustion control system, OFA system, ACI system and fabric filter system for a MSWC unit, the permittee shall conduct stack tests to determine compliance with the cadmium, dioxin/furan, hydrochloric acid, lead, mercury, PM, and VOC emissions standards in the current Title V air operation permit. Subsequent compliance tests shall be conducted in accordance with the frequencies specified in the current Title V air operation permit.

b. Within 60 days of completing construction of each new SNCR system for a MSWC unit, the permittee shall conduct performance tests to determine ammonia slip emissions in accordance with EPA method CTM-027 or EPA Method 320 or other methods approved by the Department. ~~Subsequent performance tests to determine ammonia slip emissions shall be conducted during each federal fiscal year (October 1st to September 30th).~~

c. Reserved. ~~Compliance tests for beryllium and fluorides may be conducted at the next regularly scheduled test deadline as specified in the current Title V air operation permit.~~

d. Compliance with the emissions standards for CO, NO_X, and SO_2 shall be demonstrated by data collected from the required CEMS.

e. Compliance with the opacity standards shall be demonstrated by data collected from the required COMS

[Rule 62-4.070(3), F.A.C. and Permit No. 0990234-013-AV]