

FINAL DETERMINATION

PERMITTEE

Wheelabrator South Broward, Inc.,
South Broward Waste-to-Energy
4400 South State Road 7
Ft. Lauderdale, Florida 33314

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Bureau of Air Regulation, Title V Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Air Title V Permit Revision No. 0112119-014-AV
Air Construction Permit Modification No. 0112119-013-AC (PSD-FL-105D)

The purpose of this project is to revise the Title V air operation permit for the above referenced facility.

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue an Air Construction Permit Revision and a Title V Air Operation Permit Renewal package on October 29, 2009. The applicant published the Public Notice of Intent to Issue a Title V Air Operation Permit Renewal in the Sun Sentinel on November 6, 2009. The Department received the proof of publication on November 16, 2009. A proposed permit was issued for EPA review on November 6, 2009.

COMMENTS

No comments on the proposed permit were received from the EPA Region 4 Office, local program or applicant.

CONCLUSION

The final action of the Department is to issue the permit with no changes.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor
Jeff Kottkamp
Lt. Governor
Michael W. Sole
Secretary

PERMITTEE

Wheelabrator South Broward, Inc.
4400 South State Road 7
Ft. Lauderdale, Florida 33314

Authorized Representative:
Jairaj Gosine, Plant Manager

DEP File No. PSD-FL-105D (0112119-013-AC)
South Broward Waste-to-Energy Facility
Municipal Waste Combustors, Units 1, 2 and 3
Modifications of Permit PSD-FL-105B
Expiration date: March 30, 2010
Broward County, Florida

PROJECT AND LOCATION

This is the final air construction permit, which revises Permit No. PSD-FL-105B. The project is to modify certain permit specific conditions to reflect updated rule applicability references to 40 CFR 60 Subparts Cb, Db and Eb for the three municipal waste combustors designated as Units 1, 2 and 3. Wheelabrator South Broward Waste-to-Energy Facility is categorized under Standard Industrial Classification No. 33314. The existing facility, Wheelabrator South Broward Waste-to-Energy Facility, is located in Broward County at 4400 South State Road 7 in Ft. Lauderdale. The UTM coordinates for this site are Zone 17; 579.54 kilometers (km) East and 2883.34 km North.

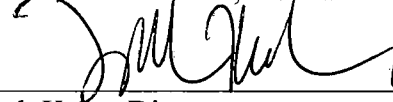
This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions).

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 not 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



Joseph Kahn, Director

12/22/09

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

This facility consists of three municipal solid waste combustors (MWC); Units 1, 2 and 3 with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. Each unit has a maximum capacity of 863 tons per day (TPD) of waste input. There is a metals recovery system which is a potential source of fugitive emissions. The nominal (generator nameplate) electric generating capacity of the facility is 67.6 megawatts (MW), which is sold to the local utility. The Title V permit includes the facility miscellaneous insignificant emissions units and/or activities.

Each unit includes an acid gas, air toxics, and particulate emissions control system consisting of a lime spray dryer absorber and fabric filter baghouse (SDA and FF). Nitrogen oxides are controlled by a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR).

EMISSIONS UNITS

This facility consists of the following emissions units (EU) listed below.

E.U. ID No.	Brief Description
001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
004	236 Ton Lime Silo with a Baghouse
005	Ash Handling System

PROJECT

Wheelabrator submitted an application for modification of its prevention of significant deterioration of air quality (PSD permit) originally issued by the U.S. Environmental Protection Agency (EPA). The requested permit modifications are to change some specific conditions of the PSD to reflect updated rule applicability references to 40 CFR 60 Subparts Cb, Db and E.

The proposed project modifications involve no changes in the previously permitted capacity limitations (charging rate monitoring, etc) compared with those in the Permit PSD-FL-105 and modifications thereto (PSD-105A, 105B, and 105C).

The proposed project does not trigger the PSD rules as a Major Stationary Source Modification or a determination of best available control technology (BACT).

The original Permit PSD-FL-105 required the SDA and FF. Permit Modification PSD-105A authorized the use of Method 29 for the testing of metals. Permit Modification PSD-105B authorized the SNCR system. Permit Modification PSD-FL-105C authorized the installation of the ACI system for further Hg control. The ACI system for Hg control would also enhance dioxin/furan (D/F) control.

REGULATORY CLASSIFICATION

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

SECTION 1. GENERAL INFORMATION

Title IV: The facility operates units (Units 1, 2 and 3) not subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

Siting: This facility is certified under the Florida Power Plant Siting Act (FPPSA), 403.501-518, F.S.

SECTION 2: PERMIT REVISIONS

The proposed project affects the following existing units:

E.U. ID No.	Brief Description
001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3

ADMINISTRATIVE REQUIREMENTS

1. Previous Permit Conditions: This permit modification, PSD-FL-105D, authorizes changes in selected conditions in the PSD-FL-105B and its equivalent conditions in the current Title V permit (0112119-011-AV). The revised Title V Permit is 0112119-014-AV. The original PSD permit numeration is retained. The following conditions are modified as follows.

SPECIFIC CONDITIONS OF PERMIT PSD-FL-105B

2. PSD-FL-105B Specific Condition **1.a.(3)** is modified as follows:

Applicable Requirements: These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; 40 CFR 61 Subpart C NESHAP for Beryllium; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply. [PSD-FL-105 (B), (D); 40 CFR 63 Subpart Cb and 40 CFR 61 Subpart C]

3. PSD-FL-105B Specific Condition **1.b.** is partially deleted and the first sentence (only distillate fuel oil or natural gas shall be used in the startup burners) is moved to Specific Condition **7.e.**

PSD-FL-105B Specific Condition **7.e** is modified as follows:

Auxiliary Burners Fuels: Only distillate fuel oil or natural gas shall be used in the startup burners. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. [Rule 62-04.070 (3) F.A.C and PSD-FL-105 (B)]

4. PSD-FL-105B Specific Condition **1.c.(2)** is modified as follows:

Continuous Charging Rate Monitoring. The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month. [Rules 62-204.800 (8)(b); 62-4.070 (3); 62-213.440 F.A.C., 40 CFR 60.58b(j) and PSD-FL-105 (B)]

5. PSD-FL-105B Specific Condition **1.d.(2)p** is modified as follows:

Mercury Testing – Method 29, Determination of Metals Emissions from Stationary Sources:

SECTION 2. PERMIT REVISIONS

Mercury emissions testing shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months from the previous performance test; and must complete five performance tests in each 5-year calendar period). Mercury stack tests shall be performed downstream of control devices or upstream and downstream of the control devices when determining compliance with the alternative removal requirement. [Rule 62-4.070 (3) F.A.C. and 40 CFR 60.38 (40 CFR 60.58b)]

6. PSD-FL-105B Specific Condition **8.d** is modified as follows:

Air Pollution Control Equipment. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.

- a. Each boiler is equipped with a particulate emission control device for the control of particulates.
- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.
- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions.

[PSD-FL-105 (B), (C), (D) and Rule 62-04.070 (3), F.A.C.]