Title V Air Operation Permit Renewal
Permit No. 0112119-015-AV

APPLICANT

The applicant for this project is Wheelabrator South Broward, Inc. The applicant's responsible official and mailing address are: Mr. Jairaj Gosine, Plant Manager, Wheelabrator South Broward, Inc., South Broward Waste-to-Energy Facility, 4400 South State Road 7, Fort Lauderdale, Florida, 33414.

FACILITY DESCRIPTION

The applicant operates the South Broward Waste-to-Energy Facility, which is located in Broward County at 4400 South State Road 7, Fort Lauderdale, Florida.

This facility consists of three municipal solid waste combustors (Unit Nos. 001, 002 and 003) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower and ancillary support equipment. The nominal (i.e., generator nameplate) electric generating capacity of the facility is 202.8 megawatts (MW), which is sold to the local utility company. Each of the combustor units at the facility includes an acid gas, air toxics, and particulate matter emissions control system consisting of a lime spray dryer and baghouse. Nitrogen oxides are controlled by a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR). There is a metals recovery system which is a potential source of fugitive emissions.

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

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Renewed Title V Air Operation Permit issued February 14, 2006.
Title V Air Operation Permit Revision issued December 11, 2009.
Application for a Title V Air Operation Permit Renewal received June 22, 2010.
Additional Information Request dated August 5, 2010.
Additional Information Response received September 10, 2010.

PRIMARY REGULATORY REQUIREMENTS

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

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.

Siting: Units 001, 002 and 003 were originally certified pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility. The emission limits for regulated pollutants for the three municipal waste combustors and auxiliary burners are equal to the NSPS, 40 CFR Subpart Cb limits, with the exception of beryllium and fluoride. Because emissions limits for the following pollutants were taken directly from Subpart Cb, CAM is not applicable for the control devices for particulate matter, cadmium, lead, dioxins/furans, mercury, nitrogen oxides, sulfur dioxide, and hydrogen chloride.

The PSD permit also contains beryllium and fluoride emission limits. However, the applicant has provided justification which demonstrates that the uncontrolled potentials to emit (PTE) the respective pollutants are significantly less than ten (10) tons per year. This finding is consistent with the Annual Operating Report data submitted for 2009 for the facility. Thus, CAM does not apply to the control devices for these pollutants. The PSD permit also contains a carbon monoxide emission limit. But, since there is no control device at the facility for this pollutant, CAM does not apply.

The Title V permit contains a particulate matter (PM) emission limit for the lime silo baghouse (Unit 004). The applicant has provided justification demonstrating that the uncontrolled potential to emit PM is less than 100 tons per year for this emissions unit. This finding is consistent with the Annual Operating Report data submitted for 2009 for the facility. Therefore, CAM does not apply.

PROJECT REVIEW

The applicant requested no changes to the current permit language. No significant changes were made to any specific conditions. The renewed permit was drafted using the latest Department approved format.

CONCLUSION

This project renews Title V Air Operation Permit No. 0112119-014-AV, which was effective on February 14, 2006. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210 and 62-213, F.A.C.