Hillsborough County
Hillsborough County Resource Recovery Facility

Final Permit No. 0570261-014-AV, Title V Air Operation Permit Renewal

APPLICANT

The applicant for this project is the Hillsborough County. The applicant's responsible official and mailing address are: Ms. Patricia V. Berry, Interim Manager, Hillsborough County, Solid Waste Management Group, 601 E. Kennedy Boulevard, Tampa, Florida 33602.

FACILITY DESCRIPTION

The Hillsborough County Resource Recovery Facility is located in Hillsborough County at 350 North Falkenburg Road, Tampa, Florida.

This existing facility consists of: four municipal solid waste combustors (Unit Nos. 1, 2, 3 and 4) with auxiliary burners; lime storage and processing facilities; ash storage and processing facilities; cooling towers; and, ancillary support equipment. Also included in this permit are miscellaneous insignificant emissions units and/or activities.

The total capacity of the Hillsborough County Resource Recovery Facility is 1,800 tons/day (TPD) of municipal solid waste fuel. The gross nominal electric generating capacity of the facility is 47 megawatts (MW).

The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc. a subsidiary of Covanta Energy Corporation.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the Title V air operation permit for the above referenced facility and to incorporate minor revisions from Permit No. 0570261-015-AC, issued concurrently with this permit.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal and Application for Concurrent Air Construction/PSD Permit Revision received on May 11, 2011.
Application Supplementary Information and Application for Concurrent Air Construction/PSD Permit Revision from CDM received via e-mail on September 20, 2011.
Additional Information requested via e-mail on September 22, 2011.
Application Supplementary Information from CDM received via e-mail on October 17, 2011.
Additional Information (Title V Air Operation Permit Renewal Application) received via e-mail on December 21, 2011.

Draft Air Construction Permit Revision clerked (issued) on March 13, 2012.
Draft/Proposed Title V Air Operation Permit Renewal posted onto web site on March 13, 2012.
Public Notice published on March 19, 2012.
Notification to U.S. EPA Region 4 of Publication of Public Notice on March 23, 2012.

PRIMARY REGULATORY REQUIREMENTS

Title III: This facility is a major source of hazardous air pollutants (HAP), based on the Title V air operation permit renewal application.

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

Title IV: This facility does not operate units subject to the acid rain provisions of the Clean Air Act.

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

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

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

CAIR: This facility does not operate units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: This facility operates units subject to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: The emissions units at this facility are not subject to CAM for one or more of the following reasons: they do not trigger the potential pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); they are not equipped with air pollution control device(s); they are equipped with device(s) which are considered to be inherent to the process/operation; or, they satisfy CAM by meeting the post-1990 40 CFR 60 Subparts Cb/Eb federal monitoring requirements for the same or similar air pollutants.

The U.S. EPA letter dated July 7, 1999 (attached to permit), supports the use of monitoring under the post-1990 40 CFR 60 Subparts Cb/Eb to satisfy CAM for the same air pollutants and mentions the use of surrogate pollutants for similar air pollutants. Air pollutants specifically regulated under 40 CFR 60 Subparts Cb/Eb for Municipal Waste Combustors (MWCs) are: total particulate matter (PM); metals and metal compounds (cadmium (Cd), mercury (Hg) and lead (Pb)); all acid gases (including, but not limited to, sulfur dioxide (SO_2) and hydrogen chloride (HCl) gases); organic compounds (includes dioxins/furans (D/F)); nitrogen oxides (NOx); and, carbon monoxide (CO). In addition to the air pollutant limits specified under 40 CFR 60 Subparts Cb/Eb for MWCs, some of the same air pollutants are regulated for other reasons i.e., PSD BACT, state implementation plan (SIP) standard, etc. A streamlined approach for multiple emission limits of the same air pollutant is preferred for simplified monitoring. As outlined in the U.S. EPA letter and described herein, monitoring under the post-1990 40 CFR 60 Subpart Cb/Eb for the municipal solid waste combustors (Unit Nos. 1, 2, 3 and 4) are therefore, deemed to be adequate for the same air pollutants.

The silo baghouses (Emissions Unit (E.U.) ID Nos. 101, 102, 108 & 110) are considered to be inherent to the process/operation. These baghouses are therefore exempt from CAM.

PROJECT REVIEW

Changes were made in the format of this renewed Title V air operation permit.

Permit

- May 10, 2006 Federal Regulation Amendments: The May 10, 2006 federal regulation amendments to 40 CFR 60 Subparts Cb and Eb adopted and incorporated by reference in Rule 62-204.800, F.A.C. are in this permit, specifically attached as Appendices 40 CFR 60 Subpart Cb (Emissions Guidelines) and Eb. Select specific applicable requirements were included in the permit specific conditions. The U.S. EPA approved state plan provision/exceptions under the 40 CFR 60 Subpart Cb (Emissions Guidelines) are included in the specific conditions of the permit. The affected Emissions Units/E.U. ID Nos. are: 001, 002 and 003 (Municipal Waste Combustor Units 1, 2 and 3); and, 100 & 112 (Ash Building and Handling System).
- Silos. Merged the lime and carbon silo (E. U. ID Nos. 101, 102, 108 & 110) subsections from Permit No. 0570261-012-AV into a single subsection of the permit in Subsection D. The dolomitic lime storage silo (E.U. ID No. 106) is not included in this renewal since it is no longer an emissions unit; it has been totally enclosed within the new air pollution control building as a result of the expansion project that added MWC Unit No. 4.

- Cooling Tower Cell for MWC Unit No. 4. This emissions unit is an unregulated emissions unit. It is moved from within the body of Permit No. 0570261-012-AV, to Appendix U, List of Unregulated Emissions Units and/or Activities.
- Engines. Engines in the previous permit, Permit No. 0570261-006-AV, were listed in Appendix I. These engines are now 'regulated' emissions units under recently promulgated federal regulations; specifically, 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE). These engines are included in this permit as 'regulated' emissions units within the body of the permit in Subsection E.
- AC/PSD Permit Revisions. The applicant requested the concurrent processing of an air construction permit revision to change air construction/PSD permit conditions. See Permit No. 0570261-015-AC/PSD-FL-121D for the changes made. The Technical Evaluation & Preliminary Determination summarizes the requested changes, the Department's responses and identifies the changes made to the underlying air construction permit conditions. These changes have been reflected within the Title V air operation permit.

CONCLUSION

This project renews Title V air operation permit No. 0570261-006-AV, which was effective May 29, 2007.

Hillsborough County Resource Recovery Facility