Lee County Department of Solid Waste Management
Lee County Resource Recovery Facility

Final Permit No. 0710119-007-AV, Title V Air Operation Permit Renewal

APPLICANT

The applicant for this project is the Lee County Department of Solid Waste Management. The applicant's responsible official and mailing address are: Mr. Lindsay J. Sampson, Director, Lee County Solid Waste Division, Lee County Resource Recovery Facility, 10500 Buckingham Road, Suite 200, Fort Myers, Florida 33905.

FACILITY DESCRIPTION

The Lee County Resource Recovery Facility is located in Lee County at 10500 Buckingham Road, Fort Myers, Florida.

This existing facility consists of: three municipal solid waste combustors (Unit Nos. 1, 2 and 3) with auxiliary burners; ash storage and processing facilities; a metals recovery system; cooling towers; and, ancillary support equipment. The total capacity of the Lee County Resource Recovery Facility is 1,980 tons/day (TPD) of municipal solid waste fuel with a nominal higher heating value (HHV) of 5,000 Btu/lb. The gross nominal electric generating capacity of the facility is 60 megawatts (MW). The facility is owned by Lee County and is currently operated by Covanta Lee, Inc.

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

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. 0710119-008-AC/PSD-FL-151E, issued concurrently with this permit.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received via Electronic Permit Submittal and Processing System (EPSAP) on August 23, 2010.
Request for Additional Information dated October 6, 2010 and sent via e-mail on October 7, 2010.
Additional Information Response received via e-mail on December 14 and 18, 2010.
Request for Additional Information sent via e-mail on February 8, 2011.
Additional Information Response received on March 7, 2011.
Waiver of 90-day permit processing clock expiring on June 16, 2011.
Draft/Proposed Title V Air Operation Permit Renewal posted onto web site on March 18, 2011.
Comments dated and received from Lee County on May 24, 2011.

Draft Air Construction/PSD Permit Revision clerked (issued) on November 18, 2011.
Revised Draft/Proposed Title V Air Operation Permit Renewal posted onto web site on November 18, 2011.
Public Notice published on December 2, 2011.
Notification to U.S. EPA Region 4 of Publication of Public Notice on December 12, 2011.

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 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: Emissions units at this facility are not subject to Compliance Assurance Monitoring (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 and 3) is therefore, deemed to be adequate for the same air pollutants.

PROJECT REVIEW

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

The comments dated and received on May 24, 2011 from Lee County had resulted in substantial changes to the draft/proposed Title V air operation permit renewal. The applicant requested changes to several underlying air construction (AC)/PSD permit conditions in their comments and subsequently submitted an AC/PSD permit revision application. The *revised* Title V air operation permit is a result of the substantial changes made to the 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 006 (Municipal Waste Combustor and Auxiliary Burners - Units 1, 2 and 3); and, 004 (Ash Handling System).

- Beryllium Emissions from MWC Units 1 and 2: A Prevention of Significant Deterioration/Best Available Control Technology (BACT) determination was performed in 1992. PSD-FL-151, Specific Condition 2.l., limits beryllium (Be) emissions from the MWC Units 1 and 2. Rule 62-210.200 (Significant Emission Rates), F.A.C. no longer lists Be, therefore, Be was effectively "delisted" as a PSD pollutant in this rule change effective August 15, 1999. The Be limits are deemed to be obsolete in accordance with Rule 62-210.300(1)(b), F.A.C. The affected Emissions Units/E.U. ID Nos. are: 001, 002 and 006 (Municipal Waste Combustor and Auxiliary Burners - Units 1, 2 and 3).
- Engines: Engines in the previous permit, Permit No. 0710119-006-AV, were listed in Appendix I. The majority of 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 now included in this permit as 'regulated' emissions units within the body of the permit under a new Subsection III.D.
- AC/PSD Permit Revisions: The applicant requested the concurrent processing of an air construction permit revision to change underlying air construction/PSD permit conditions. See Permit No. 0710119-008-AC/PSD-FL-151E for the changes made. The Technical Evaluation and 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. 0710119-004-AV, which was effective April 4, 2006.

Lee County Resource Recovery Facility

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