Title V Air Operation Permit Renewal
Permit No. 0090069-011-AV

APPLICANT

The applicant for this project is Brevard County Board of County Commissioners. The applicant's responsible official and mailing address are:

Mr. Euripides Rodriguez, Director of Brevard County Solid Waste Management Department
Brevard County Board of County Commissioners, Brevard County Central Disposal Facility
2725 Judge Fran Jamieson Way, Building A, Suite 118
Viera, Florida 32940

FACILITY DESCRIPTION

The applicant operates the Brevard County Central Disposal Facility, which is located at 2250 Adamson Road, Cocoa, Florida.

This facility consists of a municipal solid waste landfill that has been in operation since 1972. The Central Disposal Facility serves the entire County's Class I disposal needs as well as the Class III disposal needs of the northern and central parts of the County. The site has a total area of 674 acres with the footprint of the landfill covering approximately 180 acres. An additional 482-acre area provides for the related solid waste management activities and buffers. The landfill is underlain by a naturally occurring clay layer that together with man-made clay slurry walls form a bowl in which the landfill sits. The landfill has an active gas collection system installed in the side slopes of the closed lower lift. The collection system has been in operation since 1994.

The electrical generation system contains six (6) electrical generators that are individually powered by six (6) Caterpillar, Model G3520C, landfill gas-fired, spark ignition, reciprocating internal combustion engines (ICE). The generation bypass system includes a flaring station that consists of three (3) blowers and three (3) candlestick flares.

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 existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Air Construction Permit for Six (6) ICEs issued **March 06, 2007**
Title V Air Operation Permit Renewal issued **September 26, 2007**
Air Construction Permit Modification for Six (6) ICEs issued **September 04, 2008**
Air Construction Permit Modification for Six (6) ICEs issued **March 17, 2009**
Title V Air Operation Permit Revision issued **July 11, 2009**
Air Construction Permit Modification and concurrent Title V Air Operation Permit Revision issued **August 29, 2011**
Application for a Title V Air Operation Permit Renewal received **November 21, 2011**
Additional Information Request dated **January 19, 2012**

Additional Information Response received **February 20, 2012**
Notice of Intent to Issue Air Permit issued **May 16, 2012**
Public Notice Published **May 19, 2012**

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not 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 does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

- NSPS, Subpart A – General Provisions.
- NSPS, Subpart WWW– Municipal Solid Waste Landfills.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 61 and 40 CFR 63.

- 40 CFR 61, Subpart M – Asbestos.
- NESHAP, Subpart A – General Provisions.
- NESHAP, Subpart AAAA– Municipal Solid Waste Facilities.
- NESHAP, Subpart ZZZZ– Reciprocating Internal Combustion Engines.

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

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

PROJECT REVIEW

Changes that were made as part of this renewal include:

(1) Reformatted permit to new TV permit template which had the following changes:

a. Previous Specific Condition Nos. B.23., B.24., B.25. were changed to Current Specific Condition Nos. B.17., B.18., B.19., respectively;

b. Previous Specific Condition Nos. B.28. and B.29. were both captured and changed to Current Specific Condition No. B.29.; and

c. Previous Specific Condition No. B.27. was removed due to redundancy (this condition is already covered under Current Specific Condition Nos. B.23., B.28., and B.29.)

(2) List of Insignificant Emissions Units and/or Activities

1)	Maintenance Building: The truck repair area is in this metal building. Several lubricant types and used oil are inside the building.
2)	Covered Open-Face Storage Building: This area is a concrete prevention area that stores antifreeze (<100 gallons), recycled coolant (<100 gallons), kerosene (<1000

	gallons), hydraulic oil (~1000 gallons), diesel fuel (<100 gallons), and a 5-foot high metal storage cabinet for 'flammables'.
3)	Blue Storage Shed: This metal shed is used for storage by transportation department of items such as bags of fertilizer, grass seed, and absorbent.
4)	Lawn Mower Shed: This shed contains lawn equipment and is used for storage of cleaning fluid.
5)	Fuel Station: ~~One~~ Two (2) 12,000-gallon aboveground diesel tank; one (1) 5,200-gallon aboveground gasoline tank; two (2) diesel pumps with four (4) dispensing hoses, one gas ~~pump~~ dispenser. Tanks are double-walled steel tanks. ~~Throughput at the station is 390,000 gallons of diesel.~~
6)	Citizens drop off area: In this area, citizens unload their solid waste which is then loaded into off-road dump trucks with a front end loader by the County. The dump trucks then haul the waste to the working face of the landfill.
7)	Household Hazardous Waste Center: In this area, there is temporary staging of typical household hazardous waste, including: kerosene, gasoline, paints, non-oil based paint thinner, oil, used oil, propane, adhesives, and pesticides.
8)	Leachate Holding Tank: This is an open-top 16' deep metal upright 126'-6" diameter tank that discharges into the County sewer system.
9)	Yard Trash Tub-Grinders: Two large tub-grinders usually operate in this area. Due to the location of the grinding operation on the property, unconfined particulate matter emissions are negligible at the property lines. Additionally, wooded area surrounding the property act as buffers/filters.
10)	~~Air Curtain Incinerator: This incinerator is used only for emergency situations such as processing hurricane and storm debris. Operation of this incinerator is less than 400 hours per year.~~ New Vehicle Maintenance Building: The new maintenance building is projected to be complete in mid to late 2012. Lubricants and used oil will be stored and used in this facility. The current maintenance building will no longer be used for maintenance activities.
11)	Roadways: Unconfined particulate matter emissions from unpaved landfill roadways are typically reduced by the use of water trucks. However, the majority of the CDF roadways have been paved.

(3) The applicant has installed the H_2S Continuous Monitoring System (CMS) and requested by applicant in Comments on Draft Permit received on June 08, 2012, Specific Condition B.21., Fuel Analysis Requirements **(currently Specific Condition B.26. with reformatting)**, is hereby changed:

FROM:

B.21. Fuel Analysis Requirements. The permittee shall comply with the following requirements to monitor the sulfur and chlorine content of the landfill gas:
a. The permittee shall sample and analyze the landfill gas for chlorine content. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with valves open for all operating cells). The gas sample collection and analyses for chlorine content shall be done semi-annually. Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas

sampling and analyses. Results shall be reported as SO_2 and HCl emission factors in terms of lb/MMscf (equivalent in ppmv) and lb/MMBtu of landfill gas.

b. During each required compliance test conducted for HCl, the permittee shall sample and analyze the landfill gas for the chlorine content. Results for the compliance test shall be reported in terms of HCl emissions in lb/hr and the sample analysis result shall be reported as HCl emission factor in terms of lb/MMscf of landfill gas.

c. Analysis of the chlorine content shall be used to track changes in the landfill gas. Based on the analysis, the Compliance Authority may require additional stack testing for HCl emissions to determine compliance with the emissions standard.

d. Compliance with the fuel sulfur specification shall be determined based on each analysis for the sulfur content of the landfill gas.

TO:

B.26. Fuel Analysis Requirements. On a semi-annual basis, the permittee shall sample and analyze the landfill gas for chlorine content. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with valves open for all operating cells). Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses.

(4) Addition of ALT-078 as an approved alternative test method to Method 18 and addition of the EPA letter dated July 21, 2010 granting approval of this alternative to the Appendices.

CONCLUSION

This project renews Title V air operation permit No. 0090069-010-AV. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.