Title V Air Operation Permit Renewal
Permit No. 0810055-012-AV

APPLICANT

The applicant for this project is Manatee County Utility Operations Department. The applicant's responsible official and mailing address are: Charles Gore, Utilities Director, Manatee County Utility Operations Department, Manatee County Lena Road Landfill, 4410 66th Street West, Bradenton, Florida 34206-5010.

FACILITY DESCRIPTION

The applicant operates the existing Manatee County Lena Road Landfill, which is located in Manatee County at 3333 Lena Road, Bradenton, Florida.

This landfill includes three areas: Stage I (approximately 132 acres) which is a closed area; Stage III (approximately 66 acres) which is the active area; and Stage II (approximately 118 acres), which is an undeveloped expansion area which will be the last area to be used. Stage I and Stage III have an active landfill gas (LFG) collection system with an open candlestick LFG flare control device. A thermal sludge dryer also utilizes LFG from the landfill as a supplemental fuel. The landfill also includes a landfill gas-to-energy system which treats landfill gas to fuel an electric generator.

REGULATED EMISSIONS UNIT IDENTIFICATION NUMBERS AND DESCRIPTIONS

EU No.	Brief Description
003	Municipal Solid Waste Landfill
004	Sludge Dryer
005	Dried Product (Sludge/Pellets) Handling System
006	Two Dried Product (Pellet) Storage Silos
007	Dried Product (Pellet) Truck Load out Station
012	LFG-Fired Engine Generator Set (with LFG Gas Treatment System)
013	Landfill Gas (LFG) Flare
014	Three Diesel Emergency Generators (NSPS)
015	Three Diesel Emergency Generators (Pre-NSPS)

APPLICABLE REGULATIONS

Based on the Title V air operation permit renewal application received on September 30, 2014, this facility is not a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table:

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	003, 004, 005, 006, 007, 012, 013, 014
40 CFR 60, Subpart Cc, Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	003
40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills	003, 004, 012, 013
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	014

Regulation	EU No(s).
40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	012
40 CFR 61, Subpart A, General Provisions	003, 004
40 CFR 61, Subpart E, National Emission Standard for Mercury	004
40 CFR 61, Subpart M, National Emission Standard for Asbestos	003
40 CFR 63, Subpart A, General Provisions	003, 004, 012, 014, 015
40 CFR 63, Subpart AAAA, National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	003, 004, 012
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	012, 014, 015
40 CFR 98, Mandatory Greenhouse Gas Reporting Requirements	003, 004, 005, 006, 007, 012, 013
State Rule Citations	
Rule 62-204.800(8)(b)75. (40 C.F.R. Part 60, Subpart WWW, Municipal Solid Waste Landfills), F.A.C.	003
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

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

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Title V Air Operation Permit issued **February 27, 2000**
Current Title V Air Operation Permit issued **July 1, 2010**
Application for a Title V Air Operation Permit Renewal received **September 30, 2014**

PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 4953 – Refuse Systems.

North American Industry Classification System (NAICS): 562212 – Solid Waste Landfill.

HAP: 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.).

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.

GHG: The facility is identified as a major source of greenhouse gas (GHG) pollutants.

PROJECT REVIEW

This permit renewal consists primarily of incorporating the landfill gas-to-energy system into the permit, and adding the landfill gas flare and several emergency generators. One activity was moved from the "Unregulated" category to the "Insignificant" category.

1. EU 011: Two non-stationary diesel engines associated with tub grinding and power screen operations were moved from the list of "Unregulated" emissions units to the list of "Insignificant" activities. These engines are mobile and are brought on-site only when needed, so they are not subject to stationary source rules.
2. EU 012: The landfill gas-to-energy system, authorized in Permit No. 0810055-009-AC, has been incorporated into the air operation permit. This emissions unit consists of a landfill gas treatment system and a landfill gas-fired engine which generates electricity (nominal 1.6 megawatts). The treatment system is subject to requirements under NSPS Subpart WWW and NESHAP Subpart AAAA, while the engine is subject to NSPS Subpart JJJJ. The NSPS regulations include periodic emissions testing for this engine.
3. EU 013: The landfill gas flare control device has been moved out of EU 003 and added as a separate emissions unit. This flare is subject to the requirements of NSPS Subpart WWW. This candlestick flare is used to control emissions of landfill gas that originates in the landfill.
4. EU 014: Three emergency diesel generators, subject to NSPS Subpart IIII, have been incorporated in this new emissions unit. These engines meet the requirements of NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII. The generators provide emergency power to three buildings at the landfill.
5. EU 015: Four existing emergency diesel generators, subject to NESHAP Subpart ZZZZ, have been incorporated in this new emissions unit. One engine provides emergency power to the scale house, while three provide emergency power to the wastewater treatment plant. All three were constructed in 2002 or earlier, and so are not subject to NSPS regulations.
6. Applicable Regulations: The regulations associated with the changes above have been incorporated into the list of Applicable Regulations. Additionally, the mandatory greenhouse gas reporting requirements of 40 CFR 98 have been added to the list of regulations and the facility-wide conditions.
7. Appendices: Appendices of the appropriate NESHAP and NSPS regulations associated with the changes above have been incorporated into the permit. Additionally, a new Appendix LFG, which summarizes the Landfill Gas Treatment System Operating Parameters developed by the permittee, has been added.

CONCLUSION

This project renews Title V air operation permit No. 0810055-008-AV, which was effective on July 1, 2010. 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.