



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
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PERMITTEE

Waste Management Inc. of Florida
9350 NW 89th Ave
Medley, Florida 33178

Authorized Representative:
Tim Hawkins, President

Air Permit No. 0250615-015-AC
Expires: June 1, 2016
PSD-FL-414B
Medley Landfill
Facility ID No. 0250615
Air Construction Permit Extension
Medley Landfill Gas to Energy Project

PROJECT

This is the final air construction permit to extend the commence construction date requirement of Permit No. 0250615-012-AC (PSD-FL-414), modified by Permit No. 0250615-013-AC (PSD-FL-414A). This revision allows an additional 18 month extension period to commence construction from the original permitted commencement date of February 25, 2013, extended to August 25, 2014.

Medley Landfill is an existing municipal solid waste (MSW) landfill categorized under Standard Industrial Classification No. 4911. The existing facility is located in Miami-Dade County at 9350 Northwest 89th Avenue in Medley, Florida. The UTM coordinates are Zone 17, 565.04 kilometers East and 2,860.02 kilometers North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Executed in Tallahassee, Florida.

for: Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

PERMIT REVISION

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Tim Hawkins, Waste Management: (thawkins@wm.com)

Mr. Jim Christiansen, Waste Management: (jchristi@wm.com)

Ms. Diane Pupa, DEP SED: (diane.pupa@dep.state.fl.us)

Ms. Mallika Muthiah, Miami-Dade County PERA: (muthim@miamidade.gov)

Ms. Kathleen Lusky, EPA Region 4: (lusky.kathleen@epa.gov)

Ms. Heather Ceron, US EPA Region 4: (ceron.heather@epa.gov)

Ms. Lynn Searce, DEP OPC: (lynn.searce@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No. 0250615	
ID No.	Emission Unit Description
001	Flare #1 is an open, candle-type utility flare with a capacity of 3,000 standard cubic feet per minute (scfm) of landfill gas.
002	This emissions unit consists of miscellaneous fugitive non-methane organic compounds (NMOC) and hazardous air pollutant (HAP) emissions from the natural decomposition reactions associated with the landfill, which are not collected by the landfill gas collection system.
005	Flare #3 is an enclosed flare with a capacity of 6,000 scfm of landfill gas (LFG).

PROPOSED PROJECT

This permit extension authorizes the construction and initial operation of a landfill gas-to-energy plant at the existing Medley Landfill, which will use landfill gas to fuel six lean-burn reciprocating internal combustion engine/generator sets. The six engine/generator sets will deliver a combined nominal 9.6 MW of power to the electrical grid. Prior to combustion in the engines, the landfill gas will be routed through a landfill gas treatment system, which includes dewatering (a moisture knock-out vessel), gas compressors and blowers, air-to-gas coolers and 1 micron particulate filtration. Exhaust gas from each engine will exit an individual stack that is 33 feet tall and equipped with a silencer. Five of the six engines will be housed in an enclosed building. The sixth engine will be located outside the building. The two existing flares will be retained, relocated adjacent to the engines and used as necessary to control residual landfill gas not fired in the engines.

This project will add the following emissions unit.

Facility ID No. 0250615	
ID No.	Emission Unit Description
006	Six Caterpillar (CAT) Model G3520C (CAT 3520) lean-burn internal combustion engines and generator sets

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- The facility operates or will operate units subject to the following applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60): Subpart A (General Provisions), Subpart WWW (MSW Landfills) Subpart JJJJ (Spark Ignition Reciprocating Internal Combustion Engines).
- The facility operates or will operate units subject to the following applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63): Subpart A (General Provisions), Subpart AAAA (MSW Landfills) and Subpart ZZZZ (Reciprocating Internal Combustion Engines).

SECTION 2. PERMIT REVISION

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text.

PERMIT BEING MODIFIED: PERMIT NO. 0250615-012-AC (PSD-FL-414)

Section 2. Specific Condition 7 is revised as follows.

1. Source Obligation:

- (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. Waste Management of Florida and the Medley Landfill will have an additional 18 month extension of time to commence construction until February 25, 2016.
- (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]