Florida Department of Environmental Protection

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Carlos Lopez-Cantera
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Secretary

PERMITTEE

Waste Management Inc. of Florida
2700 Wiles Road
Pompano Beach, Florida 33073

Authorized Representative:
Tim Hawkins, President

Air Permit No. 0210051-024-AC
Permit Expires: 9/30/2018
Minor Air Construction Permit
Collier County Landfill
Fuel Input and Stack Testing
Modification

PROJECT

This is the final air construction permit, which modifies the stack testing frequency and the fuel input limits for the existing landfill gas fired internal combustion engines. The proposed work will be conducted at the existing Collier County Landfill, which is a Municipal Solid Waste Landfill categorized under Standard Industrial Classification No. 4953. The existing facility is in Collier County at 3750 White Lake Boulevard in Naples, Florida. The UTM coordinates are Zone 17, 434.22 kilometers (km) East, and 2893.22 km 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.

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 is not subject to 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.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

David Lyle Read, P.E.
2017.10.04 08:04:50 -04'00'

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction Permit package 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.

Tim Hawkins, WMIF: thawkins@wm.com
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EPA Region 4: R4TitleVFL@epa.gov
Ms. Lynn Scearce, DEP OPC: lynn.scearce@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.

Lynn Scearce 2017.10.04 08:38:04 -04'00'

FACILITY DESCRIPTION

The existing facility is a Class I municipal solid waste landfill. The landfill has an active gas collection and control system with a 3,000 scfm open flare. The facility includes five 0.8 MW spark ignition reciprocating internal combustion engines, a gas treatment system, and two 1,200 standard cubic foot per minute (scfm) flares (single skid) as part of a renewable energy project which converts landfill methane gas to energy. A relocatable concrete crusher is authorized to operate on the site. Note: Three (3) of the internal combustion engines No. 6, No. 7, and No. 8 are not anticipated to be constructed any time in the future due to projected landfill gas flow rates and the authorization to construct these three engines has been revoked.

The Collier County Landfill has a design capacity of 27,930,800 cubic yards. The landfill commenced construction and started receiving waste in 1976. The landfill was modified or reconstructed in 1996, 2001 and 2003. The landfill contains an active asbestos waste disposal site. The landfill does not contain a bioreactor. The gas collection and control system commenced operation on January 24, 1997. The non-methane organic compounds (NMOC) emissions are calculated to be greater than 50 Mega grams per year.

The existing facility consists of the following emissions units.

EU No.	Emission Unit Description
002	Landfill
003	3,000 scfm Open Flare
005	Crusher
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4
010	RICE No. 5
014	1,200 scfm Flare
015	1,200 scfm Flare
016	CI RICE (backup diesel generator)
018	CI RICE (6 inch Water Pump)
019	Emergency Generator
020	CI RICE (PosiShell Silo)

PROPOSED PROJECT

The applicant requests modification to the stack testing frequency and the fuel input limits for the existing landfill gas fired internal combustion engines.

This project will modify the following emissions units.

EU No.	Emission Unit Description
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4
010	RICE No. 5

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.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility operates units subject to NSPS.
- The facility operates units subject to NESHAP.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33901-2549.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

Note: Changes to previous permit conditions are highlighted in yellow with deletions indicated by ~~strikethrough~~ text and additions by double underlined text.

A. EUs 006 – 010, RICE Nos. 1 -5

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4
010	RICE No. 5

COMPLIANCE WITH EXISTING PERMIT CONDITIONS

1. Existing Permits: This permit supplements all existing valid air construction permits. The permittee shall continue to comply with all applicable conditions from valid air construction permits (as incorporated into the current Title V air operation permit), except as modified by this permit. [Rule 62-4.070, F.A.C.]

PERMIT BEING MODIFIED

Permit No. 0210051-014-AC

2. Section 4, Subsection A, Specific Condition 18.

   18. ~~LFG Flow~~ Heat Input Compliance. Compliance with the permitted ~~capacity~~ heat input ~~for maximum gas flow rate of 335.9 scfm for each engine~~ shall be demonstrated monthly by comparing the ~~. Compliance with the total LFG flow of 2,687 scfm to all eight engines and to the two new flares (EU014 and EU015) combined shall be demonstrated by a~~ 12 month rolling average to the permitted limit of 9.16 MMBtu/hr. [Rule 62-4.070(3), F.A.C. and Application No. 0210051-024-AC]

3. Section 4, Subsection A, Specific Condition 20

   ~~20. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each emissions unit shall be tested to demonstrate compliance with the emissions standards for CO, NOX, VOC and VE. Annual compliance tests for CO, NOX and VOC shall meet the testing requirements in accordance with 40 CFR 60 Subpart JJJJ. See Condition 21. [Rules 62-4.070(3), and 62-297.310(7)(a)4, F.A.C., PSD Avoidance, 40 CFR 60 Subpart JJJJ]~~

   20. Annual Compliance Tests: At least half of all emission units that operate for more than 400 hours (including startup and shutdown) during each calendar year (January 1st to December 31st) shall be tested to demonstrate compliance with the emissions standards for CO, NOx, VOC and VE. Those emission units will not require testing the following year. Any emission units that operate more than 400 hours (including startup and shutdown) that were not tested during a given year will be tested the following year. This will result in each emission unit that operates more than 400 hours being tested biannually (once every two years), with approximately half being tested in a given year. An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year; however, any such emissions units shall be tested to demonstrate compliance with the emissions standards for CO, NOX, VOC and VE every 8760 hours or every three years, whichever comes first. All compliance tests for CO, NOX and VOC shall meet the testing requirements in accordance with 40 CFR 60 Subpart JJJJ. [Rules 62-4.070(3), 62-212.400(212) (PSD Avoidance), & 62-297.310, F.A.C.; 40 CFR 60, subpart JJJJ; and Application No. 0210051-024-AC.]

4. Section 4, Subsection B, Specific Condition 2

   21. Permitted Capacity. The LFG flow to each flare shall not exceed 1,200 scfm based on a monthly average. ~~**The combined maximum total LFG flow to the engines (EU006, EU007, EU008, EU009, EU010, EU011, EU012, EU013) and the new flares (EU014 and EU015) shall not exceed 2,687 scfm based**~~

~~**on a twelve month rolling average.**~~ [Rule 62-210.200(PTE), F.A.C. and 62-212.400(212), F.A.C. for PSD Avoidance]

Permit No. 0210051-017-AC

5. Section 3, Subsection B, Specific Condition 1.

   1. Permitted Capacity (Heat Input).

      ~~a. *Gas Flow*. The maximum gas flow to each engine shall not exceed 335.9 scfm based on a monthly average. **The combined maximum total LFG flow to the engines (EU006, EU007, EU008, EU009, EU010, EU011, EU012, EU013) and the new flares (EU014 and EU015, See Subsection B.) shall not exceed 2,687 scfm based on a twelve month rolling average.**~~

      ~~b. *Heat Input*.~~ The maximum heat input rate for each engine shall not exceed 9.16 mmBtu/hr.

   [Permit No. 0210051-017-AC; ~~and~~ Rules 62-210.200(PTE) and 62-212.400(212), F.A.C. (PSD Avoidance); and Application No. 0210051-024-AC]

   ~~*{Permitting Note: The maximum total LFG flow to each engine (335.9 scfm monthly average) is based upon the engines operating at 100 percent load (9.16 mmBtu/hr) with a minimum landfill gas methane concentration of 44.5 percent and a corresponding LFG heat value of 450 Btu/scf.}*~~