

Seminole County Board of County Commissioners
Seminole County Osceola Road Landfill

Facility ID No. 1170084
Seminole County

Title V Air Operation Permit Renewal and Revision

Permit No. 1170084-010-AV
(Renewal and Revision of Title V Air Operation Permit No. 1170084-007-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Central District
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Table of Contents

<u>Section</u>	<u>Page Number</u>
I. Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Units.	2
C. Applicable Regulations.	2
II. Facility-wide Conditions.	3
III. Emissions Units and Conditions.	
A. Municipal Solid Waste Landfill with Two (2) Flares.	5
B. Internal Combustion Engine No. 1 (1.6 MW).	7
C. Internal Combustion Engine No. 2 (1.6 MW).	7
D. Internal Combustion Engine No. 3 (1.6 MW).	7
E. Internal Combustion Engine No. 4 (1.6 MW).	7
IV. Appendices.	13
Appendix A, Glossary.	
Appendix G – Alternating Operating Parameter Value for Specified Gas Extraction Wells	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix NESHAP, Subpart A – General Provisions.	
Appendix NESHAP, Subpart AAAA– Municipal Solid Waste Facilities.	
Appendix NSPS, Subpart A – General Provisions.	
Appendix NSPS, Subpart WWW– Municipal Solid Waste Landfills.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Referenced Attachments.	At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).	
Table 1, Summary of Monitoring Requirements for Municipal Solid Waste Landfills.	
Table 2, Summary of Recordkeeping Requirements for Municipal Solid Waste Landfills.	
Table 3, Summary of Reporting Requirements for Municipal Solid Waste Landfills.	
Table H, Permit History.	

FINAL PERMIT

PERMITTEE:

Seminole County Solid Waste Management
Division
1950 State Road 419
Longwood, Florida 32750

Permit No. 1170084-010-AV
Seminole County Osceola Road Landfill
Facility ID No. 1170084
Title V Air Operation Permit Renewal and Revision


The purpose of this permit is to renew and revise the Title V air operation permit for the above referenced facility. The existing Seminole County Osceola Road Landfill is located in Seminole County at 1930 East Osceola Road, Geneva, Florida. UTM Coordinates are: Zone 17, 492.26 East and 3184.50 North. Latitude is: 28°47'17" North; and, Longitude is: 81°04'45" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: **August 23, 2012**

Renewal Application Due Date: **January 10, 2017**

Expiration Date: **August 23, 2017**



Caroline D. Shine
Air Program Administrator

CDS/jr/ngm

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

Seminole County Solid Waste Management Division operates Osceola Road Landfill, a municipal solid waste (MSW) landfill, which is allocated for Class I MSW, has a design capacity of 45,000,000 cubic yards, and is also an active asbestos waste disposal site.

Methane-rich landfill gas produced from the decomposition of disposed waste materials is collected by a gas recovery system. Seminole Energy, LLC operates an electricity generation plant at the Osceola Road Landfill. In order to reduce the amount of landfill gas (LFG) wasted by flaring, all available LFG from the landfill is supplied to Seminole Energy for use as fuel to power the internal combustion (IC) engine electricity generation plant. Any excess landfill gas that exceeds the volume that the Seminole Energy, LLC Plant is able to accept is diverted to open flares for control.

The landfill currently has two candlestick flares and four IC engines with electric generators. The flares shall be operated with the flame present at all times landfill gas is being routed to the flares as determined by a thermocouple, but the flares are not subject to compliance assurance monitoring (CAM) under 40 CFR Part 64.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Municipal Solid Waste Landfill with Two (2) Flares
002	Internal Combustion Engine No. 1 (1.6 MW)
003	Internal Combustion Engine No. 2 (1.6 MW)
004	Internal Combustion Engine No. 3 (1.6 MW)
005	Internal Combustion Engine No. 4 (1.6 MW)

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal and revision application received January 20, 2012 this facility is **not** a major source of hazardous air pollutants (HAP).

The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C.

A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
40 CFR 60, Subpart A, NSPS General Provisions	All
40 CFR 60, Subpart WWW, Municipal Solid Waste Landfills	All
40 CFR 63, Subpart A, NESHAP General Provisions	All
40 CFR 63, Subpart AAAA, Municipal Solid Waste Facilities	All
State Rule Citations: 62-4.070, 62-204.800, 62-210.200, 62-212.400, 62-296.320, 62-297.310, BACT, F.A.C.	All

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “objectionable odor” means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:

- a. Tightly cover or close all VOC containers when they are not in use;
- b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc.;
- c. Maintain all piping, valves, fittings, etc. in good operating condition;
- d. Prevent excessive air turbulence across exposed VOC; and
- e. Immediately confine and clean up spills of VOC containing materials.

[Rule 62-296.320(1), F.A.C.]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;
- b. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne;
- c. Landscaping or planting of vegetation; and
- d. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C.]

SECTION II. FACILITY-WIDE CONDITIONS.

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site:
<http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
- b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Municipal Solid Waste Landfill with Two (2) Flares

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-001	<p>This emissions unit consists of an active, Class I MSW landfill with a design capacity equal to 45,000,000 cubic yards. The landfill started receiving waste in 1970. It is an active asbestos waste disposal site. There is no bioreactor at the landfill. Non-methane organic compound (NMOC) emissions are calculated to be equal to or greater than 50 mega grams per year.</p> <p>Collection and control of landfill gas emissions began in March 1999. Landfill gas emissions are collected and controlled by two flares when the gas is not being fired by the internal combustion engines.</p>

Essential Potential to Emit (PTE) Parameters

- A.1. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]
- A.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

- A.3. Visible Emissions.** The flare control system shall be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. [Rule 40 CFR 60.18(c)(1)]

Monitoring of Operations

- A.4. Thermocouple.** The flare control system shall be operated with a flame present at all times, as determined by a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18(c)(2)]

Test Methods and Procedures

{Permitting Note: The attached Table 3, Summary of Compliance Requirements for Municipal Solid Waste Landfills, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- A.5. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

EPA Method	Description of Method and Comments
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares. Each flare must be tested for visible emissions in accordance with EPA Method 22 and including 40 CFR 60.18(d)(e)&(f). The

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Municipal Solid Waste Landfill with Two (2) Flares

EPA Method	Description of Method and Comments
	test period shall be two (2) hours.

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60, Appendix A; Rules 62-4.070, 62-204.800, and 62-297.401(22), F.A.C.]

A.6. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.7. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), emissions unit (EU) 001 shall be tested to demonstrate compliance with the emissions standards for visible emissions specified in Specific Condition A.3. [Rule 62-297.310(7), F.A.C.]

Recordkeeping and Reporting Requirements

A.8. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Semi-Annual Compliance Report	Report once every 6 months (semi-annually).	40 CFR 63, Subpart AAAA

[Rule 62-213.440, F.A.C.; 40 CFR 63.1980(a)]

A.9. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

A.10. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions, 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills, and 40 CFR 63 Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Facilities (all attached and part of this permit). [Rule 62-213.440, F.A.C.]

A.11. PSD Applicability. The requirements of subsections 62-212.400(4) through (12), F.A.C., apply to the construction of any new major stationary source or the major modification of any existing major stationary source. [Rule 62-212.400(2), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-002	Internal Combustion Engine No. 1 (1.6 MW)
-003	Internal Combustion Engine No. 2 (1.6 MW)
-004	Internal Combustion Engine No. 3 (1.6 MW)
-005	Internal Combustion Engine No. 4 (1.6 MW)

Phase I

B.1. Equipment. The permittee is authorized to operate four (4) (Caterpillar Model G3520C) spark-ignited reciprocating internal combustion engines. Each engine is a 20-cylinder engine with a total displacement of approximately 86.3 liters. Each engine has a maximum rating of 2,233 bhp and is coupled to a 1,600 kW generator (nominal rating) for the generation of up to a total of 6.4 MW of electricity. Each engine will fire LFG. The LFG will pass through a gas treatment system prior to combustion in the engines.
{Permitting Note: The heat input rate is based on 100% load (2,233 bhp), a nominal landfill gas heating value of 467 British thermal units (Btu) per scf and an approximate landfill gas firing rate of 580 scfm per engine.}
[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; Permit No. 1170084-009-AC/PSD-FL-376B]

B.2. LFG Treatment System: The permittee shall operate and maintain a LFG Treatment System including equipment for: gas compression (blowers/compressors), de-watering (knock-out and chilling system) and particulate removal (filtration). Specifically, the permittee shall design, install, maintain and operate 1 micron primary and polishing filters to remove particulate matter from the LFG prior to combustion in the engines. The LFG treatment system shall not be equipped with atmospheric vents. [Rule 62-212.400, F.A.C.; Permit No. 1170084-009-AC/PSD-FL-376B]

Essential Potential to Emit (PTE) Parameters

B.3. Methods of Operation.

- a. *Fuels.* Fuel fired in the engines is permitted to use only treated LFG generated by and received from the landfill. The use of any other fuel will require an amendment to this permit.
- b. *Engines.*
 - 1) The permittee shall operate each engine at the air-to-fuel ratio that the tested engine demonstrated compliance during the most recent performance test.
 - 2) The permittee shall operate each engine within 0.5% of the O₂ content in the exhaust gas at the air-to-fuel ratio that the tested engine demonstrated compliance during the most recent performance test.
 - 3) The permittee shall install and maintain an automatic fail-safe block valve on each engine. The fail-safe block valve must stop the flow of LFG in the event of an engine failure.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

- 4) Unless otherwise indicated, the modification/construction and operation of the Caterpillar internal combustion engines shall be in accordance with the capacities and specifications stated in the application. [Rules 62-4.070, 62-210.300, 62-212.400, and 62-213.410, F.A.C.]
- B.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]
- B.5. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

- B.6. Visible Emissions.** Visible emissions from each engine/generator set exhaust shall not exceed 10 percent opacity. [Rule 62-212.400, F.A.C.]
- B.7. Nitrogen Oxides (NO_x).** The emission rate of NO_x from each engine/generator set exhaust shall not exceed 0.60 gram per brake horsepower hour (g/bhp-hr) and a maximum of 3.0 pounds per hour (lb/hr) and 12.94 tons per year (TPY). [Rule 62-212.400(12), F.A.C. and Construction Permit 1170084-009-AC]
- B.8. Carbon Monoxide (CO).** The emission rate of CO from each engine/generator set exhaust shall not exceed 3.50 g/bhp-hr and a maximum of 17.2 lb/hr.
[Rule 62-212.400(12), F.A.C. and Permit No. 1170084-009-AC/PSD-FL-376B]
- B.9. Particulate Matter (PM/PM₁₀).** PM/PM₁₀ emissions shall be minimized by the following work practice standards: installing, maintaining and operating the LFG Treatment System that meets the filtration specification.
{Permitting Note: Based on these work practice standards, the expected maximum PM/PM₁₀ emissions from each engine is 0.24 g/bhp-hr and a maximum of 1.2 lb/hr.} [Rule 62-212.400(BACT), F.A.C. and Permit No. 1170084-009-AC/PSD-FL-376B]
- B.10. Volatile Organic Compounds (VOC).** The emission rate of total VOC from each engine/generator set exhaust shall not exceed 0.28 g/bhp-hr and a maximum of 1.4 lb/hr. [Rule 62-212.400(12), F.A.C.]
- B.11. Hydrogen Chloride (HCl).** Hydrogen chloride emissions from the four engines shall not exceed 6.64 tons during any rolling 12 months. Emissions shall be calculated based on the representative chlorine content of LFG and the actual monthly fuel consumption rate of the engines and the amount flared based of the following:
- a. LFG: The representative chlorine content for a given month shall be the chlorine content determined from sampling and analysis within the same semiannual period.
 - b. Fuel Consumption: The monthly fuel consumption shall be determined from the fuel flow monitors on the engines as well as the flares.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

Compliance with the HCl emissions cap shall be determined by summing the calculated monthly HCl emissions from LPG based on stoichiometry for a rolling 12-month period. *{Permitting Note: This emissions cap ensures that the facility remains an area source of HAP emissions with regard to NESHAP Subpart ZZZZ in 40 CFR 63 (less than 10 tons per year of any single HAP and less than 25 tons per year for the combination of all HAPs)}*. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Construction Permit No. 1170084-009-AC]

B.12. Sulfur Dioxide (SO₂). Sulfur dioxide emissions from the four engines shall not exceed 16.8 tons during any rolling 12 months. Emissions shall be calculated based on the representative sulfur content of each fuel and the actual monthly fuel consumption rate of each fuel based on the following:

a. LFG: The representative sulfur content for a given month shall be the sulfur content determined from sampling and analysis within the same semiannual period.

b. Fuel Consumption: The monthly fuel consumption shall be determined from the fuel flow monitors.

Compliance with the SO₂ emissions cap shall be determined by summing the calculated SO₂ emissions from each fuel based on the stoichiometry for a rolling 12-month period. *{Permitting Note: The project avoids PSD review based on the emissions cap.}* [Rule 62-212.400(12), F.A.C. and Permit No. 1170084-009-AC/PSD-FL-376B]

Excess Emissions

B.13. Excess Emissions Allowed. Excess CO and NO_x emissions (as specified in this subsection) resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best operational practices to minimize emissions are adhered to and:

- a. To the extent practical, the operator shall strive to complete engines startups within 30 minutes; and
- b. The duration of excess emissions due to the malfunctions shall be minimized but in no case exceed two hours in any 24-hour period.

[Rule 62-210.700(1), F.A.C. and Construction Permit No. 1170084-009-AC]

B.14. Excess LFG Emissions. Excess LFG not used as fuel in an engine must be flared in accordance with the requirements of 40 CFR 60 Subpart WWW. [Rule 62-4.070, F.A.C.; 40 CFR Part 60, Subpart WWW]

Monitoring of Operations

B.15. LFG Flow Meter. Total landfill gas flow to the engines shall be continuously measured and recorded. [Rule 62-4.070, F.A.C.]

B.16. Power Generation. Gross electrical power generation (kW-hrs) shall be continuously measured for the four (4) engines combined. [Rule 62-4.070, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

B.17. Engine Operating Hours. Each engine/generator set shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time.
[Rule 62-4.070, F.A.C.]

Test Methods and Procedures

B.18. Test Methods. Required tests shall be performed in accordance with the following reference methods:

EPA Methods	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7 or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: the emission standards are based on VOC measured as methane.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer {Note: the emission standards are based on VOC measured as methane.}
ALT-078	Clarification of Approval of an Alternative to Method 18.

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. with the exception of ALT-078. No other methods may be used unless prior written approval is received from the Department. ALT-078 is included in the Appendices of Air Construction Permit No. 1170084-009-AC. [Construction Permit No. 1170084-009-AC and Rules 62-204.800, 62-212.400(BACT) and Appendix A of 40 CFR 60]

B.19. LFG Composition Analysis: The following methods shall be used to satisfy the sampling/analysis of LFG:

- Sulfur Content: ASTM Method D5504-01 or equivalent.
- Chlorine Content: Modified EPA Method TO-15 or equivalent.
- The LFG shall be collected and transported in an appropriate canister (e.g. SUMMA, Bottle-Vac Sample or equivalent).

[Rule 62-4.070(3), F.A.C. and Construction Permit No. 1170084-009-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

- B.20. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.21. Annual Compliance Tests Required.** During each federal fiscal year (October 1st to September 30th), only one of the four engines (listed in this permit section) shall be tested to demonstrate compliance with the emissions standards for VE, NO_x, CO, HCl, and SO₂. A different engine shall be tested each year such that all engines are tested during the four-year cycle. [Rule 62-297.310(7), F.A.C.]
- B.22. Compliance Tests Prior To Renewal.** Compliance tests shall be performed for VOC emissions once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **B.10**. [Rules 62-210.300(2)(a), 62-297.310(7)(a), and 62-4.070(3), F.A.C.]
- B.23. Additional Compliance Test Requirements.** For the duration of all tests the emissions units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. [Rule 62-297.310(2), F.A.C.]
- B.24. Landfill Gas Sampling/Analysis.** At least semiannually, the permittee shall obtain the following representative samples of landfill gas: a sample taken during each required compliance stack test; and a sample taken during the next semiannual period. A representative sample shall be taken in each calendar semiannual period (January-June and July-December) approximately six months apart. Each gas sample shall be collected under normal operating conditions (i.e., with valves open for all operating cells) by appropriate canister (e.g. SUMMA, Bottle-Vac Sample or equivalent). Each sample shall have an ultimate analysis conducted for at least sulfur and chlorine. Results shall also be reported as SO₂ and HCl emission factors in terms of lb/million standard cubic feet (lb/MMscf) of landfill gas. Based on the sampling results and Rule 62-297.310(7)(b)(Special Compliance Tests), F.A.C., the Compliance Authority may request additional gas sampling and analysis. [Rules 62-210.200(PTE) and 62-212.400(12), F.A.C., and Construction Permit No. 1170084-009-AC]

Recordkeeping and Reporting Requirements

- B.25. Monthly Recordkeeping Requirements.** Within ten calendar days following each month, the permittee shall observe and record the following information in a written log or electronic format accessible to a compliance inspector:
- a. The number of hours of operation of each engine;
 - b. The total monthly landfill gas flow rate to the four (4) engines combined;
 - c. Gross electrical power generation in kW-hr for the four (4) engines combined; and

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Internal Combustion (IC) Engines

- d. HCl and SO₂ emissions for the month and previous 12 months, rolling total. Emissions of HCl and SO₂ shall be calculated from the monthly fuel consumption as well as analytical results for the chlorine and sulfur contents of the landfill gas representative of the given month of operation based on the semiannual sampling for that period. [Rule 62-210.200(232), F.A.C. and Construction Permit No. 1170084-009-AC]

B.26. Record Retention. The permittee shall maintain a recordkeeping log at the facility for a period of at least five (5) years from the date the data is recorded. The log shall contain the monthly emission rates of the specified pollutants.
[Rules 62-4.070(3), and 62-213.440(1)(b)2.b., F.A.C.]

B.27. Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

B.28. Federal NSPS Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions, 40 CFR 60, Subpart WWW – Municipal Solid Waste (MSW) Landfills (attached and part of this permit). [Rule 62-213.440, F.A.C.]

B.29. Federal NESHAP Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 63, Subpart A - General Provisions, 40 CFR 63, Subpart AAAA - MSW Facilities (attached and part of this permit). Emission Units 002-005 have a construction commencement date prior to June 12, 2006. Since the engine manufacturing/order dates have been submitted, the engines are subject to the maintenance and inspection requirements of 40 CFR 63, Subpart ZZZZ. [Rule 62-213.440, F.A.C.]

B.30. PSD Applicability. The requirements of subsections 62-212.400(4) through (12), F.A.C., apply to the construction of any new major stationary source or the major modification of any existing major stationary source. [Rule 62-212.400(2), F.A.C.]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix G – Alternating Operating Parameter Value for Specified Gas Extraction Wells
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart AAAA– Municipal Solid Waste Facilities.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart WWW– Municipal Solid Waste Landfills.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.