

# Waste Management, Inc. of Florida Medley Landfill

Facility ID No. 0250615  
Miami-Dade County

## Title V Air Operation Permit Renewal

**Permit No. 0250615-014-AV**

(Renewal of Title V Air Operation Permit No. 0250615-011-AV)



### **Permitting Authority:**

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
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### **Compliance Authority:**

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**Title V Air Operation Permit Renewal**

Permit No. 0250615-014-AV

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**PERMITTEE:**

Waste Management, Inc. of Florida  
9350 Northwest 89<sup>th</sup> Avenue  
Medley, Florida 33178

Permit No. 0250615-014-AV  
Medley Landfill  
Facility ID No. 0250615  
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Medley Landfill is located at 9350 Northwest 89<sup>th</sup> Avenue, Medley, Florida in Miami-Dade County. UTM Coordinates are: Zone 17, 565.04 kilometers (km) East and 2860.02 km North. Latitude is: 25°51'31" North; and, Longitude is: 80°21'03" 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, and 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: June 19, 2014  
Renewal Application Due Date: November 5, 2018  
Expiration Date: June 18, 2019

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

JFK/dr/ttm

## SECTION I. FACILITY INFORMATION.

### **Subsection A. Facility Description.**

Waste Management, Inc. of Florida is the owner and operator of Medley Landfill, which is a municipal solid waste (MSW) landfill. This existing facility is located in Miami-Dade County, an area designated as "attainment/maintenance" for the pollutant ozone, and attainment for all other criteria pollutants in accordance with Rule 62-204.340, F.A.C.

The Medley Landfill is an open Class I Landfill with a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. This landfill commenced construction prior to 1980 as a limerock quarry that was backfilled with fill and MSW placed above the ground water table. The landfill started receiving waste prior to 1980 and was modified or reconstructed between 1987 and 1993 when Cells 1 - 3 were constructed with geosynthetic liners to accept an estimated 5 million cubic yards (MMyd<sup>3</sup>) of MSW. Between 1997 and 2000, Phase 1, 2, and 3 were developed with geosynthetic liners to accept an estimated 7 MMyd<sup>3</sup>. In 2003, the saddle fill was constructed with a geosynthetic liner to provide an additional 2 MMyd<sup>3</sup>. Yearly waste acceptance is approximately 700,000 tons.

The non-methane organic compounds (NMOC) emissions are calculated to be greater than 50 megagrams per year (Mg/year), based on USEPA's uncontrolled emission rate estimates. The Medley Landfill is a major source of criteria pollutants. This landfill does not contain a bioreactor and is an active asbestos waste disposal site. Landfill gas emissions are collected and controlled through an extraction well field system with flares.

The two existing flares consist of a 3,000 standard cubic feet per minute (scfm) open utility flare (EU 001) which was installed in 1990 and is used primarily as backup, and a 6,000 scfm enclosed flare (EU 005) which was installed in October 2001 and is used as the primary flare. Neither the enclosed flare nor the open flare is equipped with a bypass in which landfill gas can bypass the control device in a un-combusted manner.

This Landfill is subject to New Source Performance Standards (NSPS) Subpart A (General Provisions) and Subpart WWW (Standards of Performance for MSW Landfills) of 40 Code of Federal Regulations (CFR) 60; National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart A (General Provisions) and Subpart M (National Emission Standards for Asbestos) of 40 CFR 61; and NESHAP Subpart A (General Provisions) and Subpart AAAA (NESHAP for MSW Landfills) of 40 CFR 63.

This facility includes two diesel fuel fired emergency generators subject to NSPS Subpart A (General Provisions) and Subpart IIII (Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)) of 40 CFR 60; and NESHAP Subpart A (General Provisions) and Subpart ZZZZ (NESHAP for Reciprocating ICE of 40 CFR 63.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

### **Subsection B. Summary of Emissions Units.**

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Flare #1 – 3,000 scfm open utility (candle type) flare
002	Solid Waste Landfill – Fugitive 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 – 6,000 scfm enclosed flare
012	Diesel Fuel Fired Emergency Generator (1 @ 635 horse power (hp))
013	Diesel Fuel Fired Emergency Generator (1 @ 550 hp)
<i>Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)</i>	
003	Fugitive particulate matter emissions generated by daily vehicular traffic on unpaved roads within the facility.

**SECTION I. FACILITY INFORMATION.**

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

**Subsection C. Applicable Regulations.**

Based on the Title V air operation permit renewal application received November 4, 2013, this facility is not a major source of HAP. A summary of applicable regulations is shown in the following table.

<b>Regulation</b>	<b>EU Nos.</b>
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A: NSPS General Provisions	001, 002, 005, & 012
40 CFR 60, Subpart WWW: NSPS Standards of Performance for MSW Landfills	001, 002 & 005
40 CFR 60, Subpart IIII: NSPS Standards of Performance for Stationary CI ICE	012
40 CFR 61, Subpart A: NESHAP General Provisions	002
40 CFR 61, Subpart M: NESHAP for Asbestos	002
40 CFR 63, Subpart A: NESHAP General Provisions	001, 002, 005, & 013
40 CFR 63, Subpart AAAA: NESHAP MSW Landfills	001, 002 & 005
40 CFR 63, Subpart ZZZZ: NESHAP for Stationary RICE	012 & 013
<i>State Rule Citations</i>	
Rule 62-4, F.A.C.: Permits	001, 002, 005, 012, & 013
Rule 62-204, F.A.C.: Air Pollution Control – General Provisions	
Rule 62-210, F.A.C.: Stationary Sources – General requirements	
Rule 62-213, F.A.C.: Operation Permits for Major Sources of Air Pollution	
Rule 62-296, F.A.C.: Stationary Sources – Emission Standards	
Rule 62-297, F.A.C.: Stationary Sources – Emissions Monitoring	001, 002, 005, & 012

## SECTION II. FACILITY-WIDE CONDITIONS.

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**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.

- Tightly cover or close all VOC containers when they are not in use;
- Tightly cover all open tanks, which contain VOCs when they are not in use;
- Maintain all pipes, valves, fittings, etc., which handle VOCs in good operating condition;
- Confine rags used with VOCs to tightly closed, fireproof containers when not in use; and,
- Immediately confine and clean up VOC spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1), F.A.C.; and Permit No. 0250615-008-AC]

**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. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), 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:

- Paving and maintenance of roads, parking areas and yards.
- Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- 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.
- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.; Permit No. 0250615-008-AC; and, proposed by applicant in Title V air operation permit renewal application received November 4, 2013]

## SECTION II. FACILITY-WIDE CONDITIONS.

### Annual Reports and Fees

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

**FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1<sup>st</sup> of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available 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>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at [eaor@dep.state.fl.us](mailto:eaor@dep.state.fl.us).}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}*

**FW7. 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 (b), F.A.C.]

**FW8. 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 electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www.epa.gov/osweroe1/content/rmp/index.htm>. The RMP Reporting Center can be contacted at: 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. Emissions Unit 002**

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

EU No.	Brief Description
002	Solid Waste Landfill - Fugitive NMOC and HAP emissions from the natural decomposition reactions associated with the landfill, which are not collected by the landfill gas collection system.

The Medley Landfill is an open Class I Landfill with a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. This landfill commenced construction prior to 1980 as a lime-rock quarry that was backfilled with fill and MSW placed above the ground water table. The landfill started receiving waste prior to 1980 and was modified or reconstructed between 1987 and 1993 when Cells 1 - 3 were constructed with geosynthetic liners to accept an estimated 5 MMyd<sup>3</sup> of MSW. Between 1997 and 2000, Phase 1, 2, and 3 were developed with geosynthetic liners to accept an estimated 7 MMyd<sup>3</sup>. In 2003, the saddle fill was constructed with a geosynthetic liner to provide an additional 2 MMyd<sup>3</sup>. Yearly waste acceptance is approximately 700,000 tons.

The NMOC emissions are calculated to be greater than 50 Mg/year, based on USEPA’s uncontrolled emission rate estimates. The Medley Landfill is a major source of criteria pollutants. This landfill does not contain a bioreactor and is an active asbestos waste disposal site. Landfill gas emissions are collected and controlled through an extraction well field system with flares.

*{Permitting Note: This Landfill is subject to NSPS Subpart A (General Provisions) and Subpart WWW (Standards of Performance for MSW Landfills) of 40 CFR 60; NESHAP Subpart A (General Provisions) and Subpart M (National Emission Standards for Asbestos) of 40 CFR 61; and NESHAP Subpart A (General Provisions) and Subpart AAAA (NESHAP for MSW Landfills) of 40 CFR 63.*

**Essential Potential to Emit (PTE) Parameters**

- A.1. Design Capacity.** The landfill is an open Class I Landfill with a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The NMOC emissions are greater than 50 Mg/year. The landfill shall install a collection and control system that captures the gas generated within the landfill in accordance with NSPS Subpart WWW of 40 CFR 60. [Rules 62-4.160(2), 62-210.200(PTE), 62-204.800(8)(b)76, F.A.C.; and 40 CFR 60.752]
- A.2. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]
- A.3. Asbestos Disposal.** The owner or operator shall comply with at least one of the following requirements for the disposal of covered asbestos containing wastes:
  - a. There must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or
  - b. At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
    - (1) Be covered with at least 15 centimeters (cm) (6 inches) of compacted non-asbestos-containing material, or
    - (2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used with prior approval by the Department. For purposes of the paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
  - c. Use an alternative emissions control method that has received prior written approval by the Department.

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection A. Emissions Unit 002

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- d. Unless a natural barrier adequately deters access by the general public, either warning signs or fencing must be installed and maintained, or the requirements of b(1) above shall be met.

[Rule 62.204.800(10)(b)8, F.A.C.; 40 CFR 61.154(a) - (d); and Permit No. 0250615-008-AC]

#### **Control Technology**

##### **A.4. Landfill Gas Collection and Control System.**

- a. The owner or operator shall install a collection and control system that captures the gas generated within the landfill.
- (1) An active collection system shall:
- (a) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
  - (b) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
    - (i) 5 years or more if active; or
    - (ii) 2 years or more if closed or at final grade.
  - (c) Collect gas at a sufficient extraction rate;
  - (d) Be designed to minimize off-site migration of subsurface gas.
- (2) A passive collection system shall:
- (a) Comply with active collection system, passive collection system and designed to minimize off-site migration of subsurface gas.
  - (b) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.
- b. Route all the collected gas to a control system that complies with the following requirements:
- (1) An open flare designed and operated in accordance with 40 CFR 60.18 except as noted in 40 CFR 60.754(e);
  - (2) A control system designed and operated to reduce NMOC by 98 weight-percent (%), or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight-% or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry (ppmvd) basis as hexane at 3% oxygen (O<sub>2</sub>). The reduction efficiency or ppmv shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d).
    - (a) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756.
  - (3) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph b.(1) or (2) above.
- c. Operate the collection and control device installed in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.752; and Permit No. 0250615-008-AC]

#### **Operation Procedures**

##### **A.5. Active Collection Systems Specifications.**

- a. The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i), submitting a collection and control system design plan, shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Department as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. Emissions Unit 002

- (1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
- (2) The sufficient density of gas collection devices determined in paragraph (a)(1) of 40 CFR 60.759 shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
- (3) The placement of gas collection devices determined in 40 CFR 60.759(a)(1) shall control all gas producing areas, except as provided by 40 CFR 60.759(a)(3)(i) and (a)(3)(ii).
  - (a) Any segregated area of asbestos or non-degradable material may be excluded from collection if documented as provided under 40 CFR 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or non-degradable material deposited in the area, and shall be provided to the Department upon request.
  - (b) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1% of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Department upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 k L_o M_i (e^{-kt} i) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$Q_i$  = NMOC emission rate from the  $i^{\text{th}}$  section, Mg/year

$K$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram (M<sup>3</sup>/Mg) solid waste

$M_i$  = mass of the degradable solid waste in the  $i^{\text{th}}$  section, Mg

$t_i$  = age of the solid waste in the  $i^{\text{th}}$  section, years

$C_{NMOC}$  = concentration of NMOC, parts per million by volume (ppmv)

$3.6 \times 10^{-9}$  = conversion factor

- (c) The values for  $k$  and  $C_{NMOC}$  determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_o$  and  $C_{NMOC}$  provided in 40 CFR 60.754(a)(1) or the alternative values from 40 CFR 60.754(a)(5) shall be used. The mass of non-degradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the non-degradable material is documented as provided in 40 CFR 60.759(a)(3)(i).
- b. The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A), collection and control system, shall construct the gas collection devices using the following equipment or procedures:
- (1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection A. Emissions Unit 002

impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

- (2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
  - (3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- c. Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A), collection and control system, shall convey the landfill gas to a control system in compliance with 40 CFR 60.752(b)(2)(iii) through the collection header pipes. The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:
- (1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 40 CFR 60.759(c)(2) shall be used.
  - (2) For new collection systems, the maximum flow rate shall be in accordance with 40 CFR 60.755(a)(1). [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.759; and Permit No. 0250615-008-AC]

- A.6. Operational Standards.** The owner or operator of an of an MSW landfill with a gas collection and control system used to comply with the provisions of 40 CFR 60.752(b)(2)(ii), collection and control system, of this subpart shall:
- a. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
    - (1) 5 years or more if active; or
    - (2) 2 years or more if closed or at final grade.
  - b. Operate the collection system with negative pressure at each wellhead except under the following conditions:
    - (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1).
    - (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan.
    - (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Department.
  - c. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (°C) and with either a nitrogen level less than 20% or an O<sub>2</sub> level less than 5%. The owner or operator may establish a higher operating temperature, nitrogen, or O<sub>2</sub> value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
    - (1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i) of NSPS Subpart WWW.
    - (2) Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i) of NSPS Subpart WWW, the O<sub>2</sub> shall be determined by an O<sub>2</sub> meter using Method 3A or 3C except that:
      - (a) The span shall be set so that the regulatory limit is between 20% – 50% of the span;

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- (b) A data recorder is not required;
  - (c) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
  - (d) A calibration error check is not required;
  - (e) The allowable sample bias, zero drift, and calibration drift are  $\pm 10\%$ .
- d. Operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- e. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and
- f. Operate the control or treatment system at all times when the collected gas is routed to the system.
- g. If monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c) of NSPS Subpart WWW. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40 CFR 60.753.
- [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.753; and Permit No. 0250615-008-AC]

#### Compliance Provisions

##### **A.7.** Requirements of 40 CFR Part 63, Subpart AAAA.

- a. The owner or operator shall comply with the requirements of 40 CFR part 60, Subpart WWW.
- b. If you are required by 40 CFR 60.752(b)(2) of Subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions of 40 CFR 63 specified in Table 1 of NESHAP Subpart AAAA.
- c. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 Subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of 40 CFR 63 as specified in Table 1 of NESHAP Subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3-hour monitoring block average.

[Rule 62-204.800(11)(b)59, F.A.C.; 40 CFR 63.1955; and Permit No. 0250615-008-AC]

##### **A.8.** Gas Collection System. Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods in 40 CFR 60.752(a)(1) – (a)(6) shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii).

- a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The  $k$  and  $L_0$  kinetic factors should be those published in the most recent Compilation of Air Pollutant

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Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Department. If  $k$  has been determined as specified in 40 CFR 60.754(a)(4), the value of  $k$  determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(1) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_M = 2L_O R (e^{-kc} - e^{-kt})$$

where,

$Q_M$  = maximum expected gas generation flow rate,  $\text{cm}^3/\text{year}$

$L_O$  = methane generation potential,  $\text{cm}^3/\text{Mg}$  solid waste

$R$  = average annual acceptance rate,  $\text{Mg}/\text{year}$

$k$  = methane generation rate constant,  $\text{year}^{-1}$

$t$  = (age of the landfill at equipment installation) + (the time the owner or operator intends to use the gas mover equipment) or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years

$c$  = time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ )

(2) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2kL_O M_i (e^{-kt_i})$$

where,

$Q_M$  = maximum expected gas generation flow rate,  $\text{cm}^3/\text{year}$

$k$  = methane generation rate constant,  $\text{year}^{-1}$

$L_O$  = methane generation potential,  $\text{cm}^3/\text{Mg}$  solid waste

$M_i$  = mass of solid waste in the  $i^{\text{th}}$  section,  $\text{Mg}$

$t_i$  = age of the  $i^{\text{th}}$  section, years

(3) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1) (i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755(a)(1) (i) and (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(a)(1); and Permit No. 0250615-008-AC]

**A.9. Gas Collectors – Density.** For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Department, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(a)(2); and Permit No 0250615-008-AC]

**A.10. Gas Collection System – Flow Rate.** For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval. The owner or

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operator is not required to expand the system as required in 40 CFR 60.755(a)(3) during the first 180 days after gas collection system startup. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(a)(3) and (4); and Permit No 0250615-008-AC]

- A.11. Excess Air Infiltration.** For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or O<sub>2</sub> as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(a)(5); and Permit No 0250615-008-AC]
- A.12. Alternative Off-Site Migration.** The owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to the Department as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(a)(6); and Permit No 0250615-008-AC]
- A.13. Well Installation.** For purposes of compliance with 40 CFR 60.753(a), the owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
- 5 years or more if active; or
  - 2 years or more if closed or at final grade.
- [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(b); and Permit No. 0250615-008-AC]
- A.14. Alternative to Open Flare or Combustors.** The owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Department as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Department shall review the information and either approve it, or request that additional information be submitted. The Department may specify additional appropriate monitoring procedures.
- [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.756(d); and Permit No. 0250615-008-AC]
- A.15. Surface Methane Monitoring.** The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d).
- After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).
  - The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
  - Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of 40 CFR 60, except that the probe inlet shall be placed within 5 to 10 centimeters (cm) of the ground. Monitoring shall be performed during typical meteorological conditions.
  - Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i) – (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).
    - The location of each monitored exceedance shall be marked and the location recorded.

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- (2) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
  - (3) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) has been taken.
  - (4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR 60.755(c)(4) (ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4) (iii) or (v) shall be taken.
  - (5) For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Department for approval.
- e. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(c); and Permit No. 0250615-008-AC]

**A.16. Surface Methane Concentration Monitoring.** The owner or operator seeking to comply with the provisions in 40 CFR 60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

- a. The portable analyzer shall meet the instrument specifications provided in Section 3 of Method 21 of Appendix A of 40 CFR 60, except that “methane” shall replace all references to VOC.
- b. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.
- c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of Appendix A of 40 CFR 60, the instrument evaluation procedures of Section 4.4 of Method 21 of Appendix A of 40 CFR 60 shall be used.
- d. The calibration procedures provided in Section 4.2 of Method 21 of Appendix A of 40 CFR 60 shall be followed immediately before commencing a surface monitoring survey.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(d); and Permit No. 0250615-008-AC]

**A.17. Startup – Shutdown – Malfunction (SSM).** The provisions of this subpart apply at all times, except during periods of SSM, provided that the duration of SSM shall not exceed 5 days for collection systems and shall not exceed 1 hour of free venting for treatment or control devices.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(e); and Permit No. 0250615-008-AC]

**A.18. Compliance Determination.** Compliance is determined in the same way it is determined for 40 CFR 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement or maintain a copy of the SSM plan is a deviation from the requirements of NESHAP 40 CFR 63 Subpart AAAA. [Rule 62-204.800(11)(b)59, F.A.C.; 40 CFR 63.1960; and Permit No. 0250615-008-AC]

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- A.19. Deviation Determination.** A deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in 40 CFR 63.1965(a) - (c).
- a. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of Subpart WWW are exceeded.
  - b. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
  - c. A deviation occurs when a SSM plan is not developed or maintained on site.  
[Rule 62-204.800(11)(b)59, F.A.C.; 40 CFR 63.1965; and Permit No. 0250615-008-AC]
- A.20. 3-Hour Block Average Determination.** Averages are calculated in the same way as they are calculated in 40 CFR 60 Subpart WWW, except that the data collected during the following events are not to be included in any average computed under 40 CFR 63 Subpart AAAA:
- a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
  - b. Startup, shutdown and malfunction.  
[Rule 62-204.800(11)(b)59, F.A.C.; 40 CFR 63.1975; and Permit No. 0250615-008-AC]

**Monitoring of Operations**

- A.21. Gas Collection System Monitoring Requirements.** The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
- a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and
  - b. Monitor nitrogen or O<sub>2</sub> concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and
  - d. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).  
[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.756(a); and Permit No. 0250615-008-AC]
- A.22. Alternative System Monitoring Requirements.** The owner or operator seeking to install a collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 40 CFR 60.756 shall provide information satisfactory to the Department as provided in 40 CFR 60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Department may specify additional appropriate monitoring procedures.  
[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.756(e); and Permit No. 0250615-008-AC]

**Test Methods and Procedures**

- A.23. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25C	Determination of NMOC in MSW landfill gases

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.  
[Rule 62-297.401, F.A.C.]

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**A.24. 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.25. Collection and Control System Removal Determination.** After the installation of a collection and control system in compliance with 40 CFR 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the following equation:

$$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$$

where,

$M_{NMOC}$  = mass emission rate of NMOC, Mg/year

$Q_{LFG}$  = flow rate of landfill gas, cm<sup>3</sup>/minute

$C_{NMOC}$  = NMOC concentration, ppmv as hexane

- a. The flow rate of landfill gas,  $Q_{LFG}$ , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of Section 4 of Method 2E of Appendix A of 40 CFR 60.
- b. The average NMOC concentration,  $C_{NMOC}$ , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR 60. If using Method 18 of Appendix A of 40 CFR 60, the minimum list of compounds to be tested shall be those published in the most recent AP-42. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The owner or operator shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR 60 by six to convert from  $C_{NMOC}$  as carbon to  $C_{NMOC}$  as hexane.
- c. The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Department.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.754(b); and Permit No. 0250615-008-AC]

**A.26. Additional Compliance Test Requirements.** When calculating emissions for Prevention of Significant Deterioration (PSD) purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.754(c); and Permit No. 0250615-008-AC]

**Recordkeeping and Reporting Requirements**

**A.27. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Conditions</b>
Equipment Removal Report	30 days prior to removal or cessation of operation	A.29.
Collection and Control System Reports	Initially and every 6 months thereafter	A.30.
Landfill Closure Reporting Requirements	within 30 days of waste acceptance cessation	A.39.

[Rule 62-213.440(1)(b), F.A.C.]

**A.28. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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- A.29. Equipment Removal Report.** The owner or operator of a controlled landfill shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.
- a. The equipment removal report shall contain all of the following items:
    - (1) A copy of the closure report submitted in accordance with 40 CFR 60.757(d);
    - (2) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
    - (3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC/year.
  - b. The Department may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.  
[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.757(e); and Permit No. 0250615-008-AC]
- A.30. Collection and Control System Reports.** The owner or operator seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to the Department semi-annual reports of the following recorded information. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).
- a. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a)-(d).
  - b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.
  - c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
  - d. All periods when the collection system was not operating in excess of 5 days.
  - e. The location of each exceedance of the 500 ppm methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
  - f. The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).  
[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.757(f); 40 CFR 63.1980(a); and Permit No. 0250615-008-AC]
- A.31. Excavating Asbestos Containing Material.** The owner or operator shall notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
- a. Scheduled starting and completion dates.
  - b. Reason for disturbing the waste.
  - c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
  - d. Location of any temporary storage site and the final disposal site.  
[Rule 62-204.800(10)(b)8, F.A.C.; and 40 CFR 61.154(j)]
- A.32. Landfill Records.**
- a. Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
  - b. Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the following data as

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measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(ii):
  - (a) The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Department.
  - (b) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1).
- c. Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of NSPS Subpart WWW shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
  - (1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b).
  - (2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii).

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.758(a), (b)(1) and (d); and Permit No. 0250615-008-AC]

**A.33. Asbestos Records and Reports.** The owner or operator shall maintain records and reports in accordance with 40 CFR 61.154(e) and for a period of at least five years. [Rule 62-204.800(10)(b)8, F.A.C.; 40 CFR 61.154(e); and Permit No. 0250615-008-AC]

**A.34. Asbestos Location Records.** The owner or operator shall maintain, until closure, location records of the asbestos containing waste subject to 40 CFR 61.154 in accordance with 40 CFR 61.154(f). [Rule 62-204.800(10)(b)8, F.A.C.; 40 CFR 61.154(f); and Permit No. 0250615-008-AC]

**A.35. 40 CFR Part 63, Subpart AAAA Records.**

- a. Keep records and reports as specified in 40 CFR 60, Subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR 60, Subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.
- b. You must also keep records and reports as specified in the general provisions of 40 CFR 60 and 40 CFR 63 as shown in Table 1 of 40 CFR 63.
- c. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. [Rule 62-204.800(11)(b)59, F.A.C.; 40 CFR 63.1980; and Permit No. 0250615-008-AC]

**A.36. Recordkeeping Requirements.**

- a. Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any SSM in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection A. Emissions Unit 002

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be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Rule 62-204.800(4)(a), F.A.C.; 40 CFR 60.7; and Permit No. 05250615-008-AC]

#### **Landfill Closure Requirements**

- A.37. Collection and Control System Capping or Removal Requirements.** The collection and control system may be capped or removed provided that the following conditions are met:
- The landfill shall be a closed landfill as defined in 40 CFR 60.751 of NSPS Subpart WWW. A closure report shall be submitted to the Department as provided in 40 CFR 60.757(d);
  - The collection and control system shall have been in operation a minimum of 15 years; and
  - Following the procedures specified in 40 CFR 60.754(b) of NSPS Subpart WWW, the calculated NMOC gas produced by the landfill shall be less than 50 Mg/year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
- [40 CFR 60.752(b)(2)(v); and Permit No. 0250615-008-AC]
- A.38. Landfill Closure.** When a MSW landfill subject to NSPS Subpart WWW is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:
- The landfill was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or
  - The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v).
- [Rule 62-204.800(8)(b)76, F.A.C.; and 40 CFR 60.752(d)]
- A.39. Landfill Closure Reporting Requirements.** The owner or operator of a controlled landfill shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4). [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.757(d); and Permit No. 0250615-008-AC]
- A.40. Surface Methane Concentration Monitoring.** Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.755(f); and Permit No. 0250615-008-AC]
- A.41. Asbestos Closure Records.** Submit to the Department, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. [Rule 62-204.800(10)(b)8, F.A.C.; 40 CFR 61.154(h); and Permit No. 0250615-008-AC]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Units 001 and 005

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

EU No.	Brief Description
001	Flare #1 – 3,000 scfm Open Utility (Candlestick Type) Flare
005	Flare #3 – 6,000 scfm Enclosed Flare

Flare No. 1 is an open candlestick utility flare, manufactured by Landfill Gas Specialties, and has a maximum flow rate of 3,000 scfm (equivalent to 0.18 million cubic feet/hour (MMcf/hour) and 1,576.8 MMcf/year). The flare was installed in 1990 and is used primarily as a backup flare during outages of Flare No. 3 and during increased landfill gas generation. The open flare stack is 2-feet in diameter with a height of 58 feet above ground. The flare is subject to a minimum exit velocity requirement of 18.3 meters/second (m/sec). The flare is designed for an overall 98% destruction efficiency of total hydrocarbons at a design flow with a landfill gas methane content of 40% to 60%.

Flare No. 3 is an enclosed flare, manufactured by Landfill Gas Specialties (Model No. EF1355I16), and has a maximum flow rate of 6,000 scfm. The flare was installed in October of 2003 and started operation November 5, 2003 and is used as the primary flare. The enclosed flare stack is 12.5 feet in diameter with a height of 55 feet above ground. The flare is subject to a minimum temperature requirement of 1,400 degrees Fahrenheit (°F). The flare is designed for an overall 99% destruction efficiency for total hydrocarbons and 98% destruction efficiency for NMOC.

Neither the enclosed flare nor the open flare is equipped with a bypass in which landfill gas can bypass the control device in a un-combusted manner.

*{Permitting Note: These emissions units are regulated under NSPS Subpart A (General Provisions) and NSPS Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills) of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.}*

#### **Essential Potential to Emit (PTE) Parameters**

##### **B.1. Permitted Capacity.**

- a. *Flare #1*
  - (1) Open “candlestick-type” flare
  - (2) Maximum landfill gas flow rate of 3,000 scfm.
- b. *Flare #3*
  - (1) Enclosed flare;
  - (2) Maximum landfill gas flow rate of 6,000 scfm.

[Rule 62-210.200(PTE), F.A.C.]

##### **B.2. Authorized Fuel.** Only landfill gas shall be fired in the flares. [Rule 62-210.200(PTE), F.A.C.]

##### **B.3. Hours of Operation.** These emissions units may operate continuously (8,760 hours/year).

[Rule 62-210.200(PTE), F.A.C.]

#### **Operation Procedures**

##### **B.4. Operational Standards.**

- a. Operate the control or treatment system at all times when the collected gas is routed to the system.
- b. Flares shall be steam-assisted, air-assisted, or non-assisted.
- c. Flares shall be operated with a flame present at all times.
- d. Flares shall be operated at all times when emissions may be vented to them.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18; 40 CFR 60.753(f); and Permit No. 0250615-008-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Units 001 and 005

B.5. Heat Content Specifications.

- a. Flares shall be used only with the net heating value of the gas being combusted being 11.2 mega joules/standard cubic meter (MJ/scm) (300 British thermal units/standard cubic feet (Btu/scf)) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated by the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25°C and 760 millimeters (mm) mercury (Hg), but the standard temperature for determining the volume corresponding to one mole is 20°C;

$$K = \text{Constant} \left( \frac{1}{ppm} \right) \left( \frac{g \text{ mole}}{scm} \right) \left( \frac{MJ}{kcal} \right)$$

where the standard temperature for  $\left( \frac{gmole}{scm} \right)$  is 20°C

- $C_i$  = Concentration of sample component  $i$  in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in 40 CFR 60.17); and
- $H_i$  = Net heat of combustion of sample component  $i$ , kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.
- b. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- c. The maximum permitted velocity,  $V_{max}$ , for flares complying with 40 CFR 60.18 (c)(4)(iii) shall be determined by the following equation:

$$\log_{10}(V_{max}) = (H_T + 28.8)/31.7$$

where,

$V_{max}$  = Maximum permitted velocity, m/sec

28.8 = Constant

31.7 = Constant

$H_T$  = The net heating value as determined in 40 CFR 60.18 (f)(3).

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(c) and (f); and Permit No. 0250615-008-AC]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Units 001 and 005

**B.6. Maximum Tip Velocity Specifications.** Steam-assisted and non-assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60(f)(4), less than 18.3 m/sec (60 feet/sec), except as provided:

- a. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60(f)(4), equal to or greater than 18.3 m/sec (60 feet/sec) but less than 122 m/sec (400 feet/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf);
- b. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60(f)(4), less than the velocity,  $V_{max}$ , as determined by the methods specified in 40 CFR 60(f)(5), and less than 122 m/sec (400 feet/sec) are allowed.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(c); and Permit No. 0250615-008-AC]

**B.7. Design Specifications.**

- a. Flare No. 3 (EU 001) has the option to meet Conditions **B.5.** and **B.6.** or shall meet the following design specifications: have a diameter of 3 inches or greater; are non-assisted; have a hydrogen content of 8% (by volume), or greater; and are designed for and operated with an exit velocity less than 37.2 m/sec (122 feet/sec) and less than the velocity,  $V_{max}$ , as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

$V_{max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-% hydrogen.

$K_2$  = Constant, 3.9(m/sec)/volume-% hydrogen.

$X_{H2}$  = The volume-% of hydrogen, on a wet basis, as calculated by using the ASTM Method D1946-77. (Incorporated by reference as specified in 40 CFR 60.17).

- b. The actual exit velocity of a flare shall be determined by the method specified in 40 CFR 60(f)(4).

[Rule 62-204.800(8), F.A.C.; and 40 CFR 60.18(c)]

**B.8. Air-Assisted Flares.** Air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{max}$ , as determined by the method specified in 40 CFR 60(f)(6).

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(c); and Permit No. 0250615-008-AC]

**B.9. Enclosed Flare Flame Temperature.** The enclosed flare system (EU 005) shall be operated so that the flame temperature is always at or above 1400°F. The system shall be calibrated such that if flame temperature is less than 1400°F, the system will automatically shut down.

[Permit No. 0250615-008-AC]

### **Emission Limitations and Standards**

**B.10. Visible Emissions.** Flares shall be designed for, and operated with, no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(c); and Permit No. 0250615-008-AC]

### **Monitoring of Operations**

**B.11. Flare Monitoring.** Owners or operators of flares shall monitor these control devices to ensure that the flares are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(d); and Permit No. 0250615-008-AC]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Units 001 and 005**

- B.12. Monitoring of operations – Open Flare.** Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
  - b. A device that records flow to or bypass of the flare. The owner or operator shall either:
    - (1) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - (2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.18(f), 40 CFR 60.756(c); and Permit No. 0250615-008-AC]

- B.13. Monitoring of operations – Enclosed Flare.** The permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:
- a. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1\%$  of the temperature being measured expressed in  $^{\circ}\text{C}$  or  $\pm 0.5^{\circ}\text{C}$ , whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts (MW).
  - b. A device that records flow to or bypass of the control device. The owner or operator shall either:
    - (1) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes, or
    - (2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.756(b); and Permit No. 0250615-008-AC]

**Test Methods and Procedures**

- B.14. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

<b>Method</b>	<b>Description of Method and Comments</b>
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
3C	Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25, 25C	Determination of NMOC in MSW landfill gases

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. [Rule 62-297.401, F.A.C.]

- B.15. 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.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Units 001 and 005**

**B.16. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), Flare No. 1 (EU 001) shall be tested to demonstrate compliance with the emissions standards for opacity. Due to the variable flow nature of landfill gas, the flare is not limited to operating at 110% of the maximum rate tested during the previous annual emissions tests. [Rule 62-297.310(7), F.A.C.; and Permit No. 0250615-008-AC]

**B.17. Visible Emissions.** The test method for visible emissions shall be EPA Method 22 of Appendix A of 40 CFR 60. The observation period shall be 2-hours. [Rule 62-204.800(8), F.A.C.; and 40 CFR 60.18(f)(1)]

**B.18. Test Methods and Procedures for Methane Concentration.**

- a. For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25, 25C or Method 18 of Appendix A of 40 CFR 60 shall be used to determine compliance with 98 weight - % efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Department as provided by 40 CFR 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine O<sub>2</sub> for correcting the NMOC concentration as hexane to 3%. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as Hexane), Method 25A should be used in place of Method 25. If using Method 18 of Appendix A of 40 CFR 60 Subpart WWW, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}})/(\text{NMOC}_{\text{in}})$$

where,

NMOC<sub>in</sub> = mass of NMOC entering control device

NMOC<sub>out</sub> = mass of NMOC exiting control device

- b. For the performance test required in 40 CFR 60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in 40 CFR 60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under 40 CFR 60.18(f)(4).

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.754(d) and (e); and Permit No. 0250615-008-AC]

**Recordkeeping and Reporting Requirements**

**B.19. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Equipment Removal	30 days prior to removal or cessation	<b>B.21.</b>
Semi-annual Reports	30 days after the end of the semi-annual period	<b>B.22.</b>

[Rule 62-213.440(1)(b), F.A.C.]

**B.20. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**B.21. Equipment Removal Reporting Requirement.** Each owner or operator of a controlled landfill shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.

- a. The equipment removal report shall contain all of the following items:
  - (1) A copy of the closure report submitted in accordance with 40 CFR 60.757(d);
  - (2) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Units 001 and 005

(3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year.

- b. The Department may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.757(e); and Permit No. 0250615-008-AC]

**B.22. Semi-annual Reports.** Each owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to the Department semi-annual reports of the recorded information in **B.22.a.** through **B.22.f.** For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).

- a. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a)-(d).
- b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.
- c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
- d. All periods when the collection system was not operating in excess of 5 days.
- e. The location of each exceedance of the 500 ppm methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- f. The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.757(f); and Permit No. 0250615-008-AC]

**B.23. Test Reports:** Test reports shall comply with F.A.C. Rule 62-297.310(8), Test Reports. Additionally, the compliance test report shall provide the following information on the air pollution control devices:

- a. General condition of equipment, noting any deficiencies or problems with the equipment, which occur during testing.
- b. Normal operating parameters of the equipment and the actual operation parameters for each test run.

[Rule 62-297.310(8), F.A.C.; and Permit No. 0250615-008-AC]

**B.24. Visible Emissions Test Report:** The required visible emissions test report shall also contain the extraction wells gas flow rate and the flare temperature data. [Permit No. 0250615-008-AC]

**B.25. Flare Records.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the following data as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- a. Where an owner or operator subject to the provisions of 40 CFR 60 Subpart WWW seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 MW:
  - (1) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
  - (2) The percent reduction of NMOC determined as specified in 60.752(b)(2)(iii)(B) achieved by the control device.
- b. Where an owner or operator subject to the provisions of NSPS Subpart WWW seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.758(b)(2); and Permit No. 0250615-008-AC]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection B. Emissions Units 001 and 005

- B.26. Operation Parameter Records.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of NSPS Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
- a. The following constitutes as an exceedance that shall be recorded and reported under §60.757(f) - For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 MW (150 MMBtu/hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with §60.752(b)(2)(iii) was determined.
  - b. Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
  - c. Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
- [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.758(c); and Permit No. 0250615-008-AC]
- B.27. Exceedance Records.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of NSPS Subpart WWW shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [Rule 62-204.800(8)(b)76, F.A.C.; 40 CFR 60.758(e); and Permit No. 0250615-008-AC]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emission Unit 012**

**Subsection C. The specific conditions in this section apply to the following emissions units:**

<b>EU No.</b>	<b>Brief Description</b>
012	Emergency Diesel Generator (635 hp)

This emissions unit is a stationary compressions ignition (CI) reciprocating internal combustion engine (RICE) that has a maximum engine rating of 635 brake-horsepower (bhp) at 100% load. The electrical generator has a nominal power rating of 474 kilowatt (kW). This emergency generator is located at the flare station.

The following table provides important details for the engine collectively regulated as EU 012:

<b>Engine Identification</b>	<b>Engine Brake hp</b>	<b>Date of Construction</b>	<b>Model Year</b>	<b>Displacement liters/cylinder (l/c)</b>	<b>Engine Manufacturer</b>	<b>Model No.</b>
Flare Station Emergency Diesel Engine	635 (474 kW)	2006	06/2006	2.3	Detroit Diesel	4M4021

*{Permitting Note: This CI RICE is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This RICE is not used for fire pumps. This permit section addresses “new” stationary CI RICE greater than 500 HP, with a displacement less than 10 liters per cylinder, that is located at an area source of HAP and that has been modified, reconstructed or commenced construction on or after 7/11/2005 and have a pre-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}*

**Essential Potential to Emit (PTE) Parameters**

- C.1. Authorized Fuel.** This Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:
- a. *Sulfur Content.* The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra low sulfur) for non-road fuel.
  - b. *Cetane and Aromatic.* The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.
  - c. *Marking Provisions.* The diesel fuel fired shall be free of marker solvent yellow 124 until November 30, 2014. After December 1, 2014, there are no requirements or restrictions on the use of marker solvent yellow 124.
  - d. *Use of Existing Fuel.* Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[Rule 62-204.800, F.A.C.; 40 CFR 60.4207(b), 80.510(c), 80.510(f)(2) & 80.510(f)(7)]

- C.2. Restricted Hours of Operation.**
- a. *Maintenance and Testing.* These engines are authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
  - b. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations.
  - c. *Non-emergency Situations.* These engines may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection C. Emission Unit 012

- d. *Other Situations.* These engines cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4211(f)]

- C.3. Operation and Maintenance.** The owner or operator must operate and maintain the stationary CI internal combustion engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. This RICE must be maintained and operated to meet the emissions limits in Specific Conditions **C.4.** through **C.7.** over the entire life of the engine.

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4206, 4211(a)(1), (2) & (3)]

#### **Emissions Standards**

- C.4. Nitrogen Oxide (NO<sub>x</sub>).** Emissions of NO<sub>x</sub> shall not exceed 9.2 g/kW-hr (6.9 g/HP-hr).

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4205(a) & Table 1]

- C.5. Hydrocarbons (HC).** Emissions of HC shall not exceed 1.3 g/kW-hr (1.0 g/HP-hr).

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4205(a) & Table 1]

- C.6. Carbon Monoxide (CO).** Emissions of CO shall not exceed 11.4 g/kW-hr (8.5 g/HP-hr).

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4205(a) & Table 1]

- C.7. Particulate Matter (PM).** Emissions of PM emissions shall not exceed 0.54 g/kW-hr (0.4 g/HP-hr).

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4205(a) & Table 1]

#### **Testing and Compliance Requirements**

- C.8. Engine Certification Requirements.** The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **C.9.** [Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4211(b)]

- C.9. Compliance Requirements Due to Loss of Certification.** If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4211(g)(3)]

- C.10. Testing Requirements.** In the event performance tests are required pursuant to Specific Condition **C.9.**, the following requirements shall be met:

- Testing Procedures.* The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. [Link to Subpart F](#)
- NTE Standards.* Exhaust emissions from this engine must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power in 40 CFR Part 1039, Subpart B as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR Part 1039. [Link to Subpart B](#)

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emission Unit 012

[Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4212(a) & (b)]

**C.11. Common Testing Requirements.** Unless otherwise specified and if required, 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.]

#### **Monitoring Requirements**

**C.12. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4209(a)]

#### **Records and Reports**

**C.13. Hours of Operation Records.** The owner or operator must keep records of the operation of the engine in emergency and non-emergency services that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [Rule 62-204.800(8)(b)80, F.A.C.; and 40 CFR 60.4214(b)]

**C.14. Maintenance Records.** To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition **C.9.**, the owner or operator must keep the following records:

- Engine manufacturer documentation and certification indicating compliance with the standards.
- A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
- A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.]

**C.15. Testing Notification.** At such time that the requirements of Specific Condition **C.10.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1)]

**C.16. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection D. Emissions Unit 013**

**Subsection C. The specific conditions in this section apply to the following emissions units:**

<b>EU No.</b>	<b>Brief Description</b>
013	Emergency Diesel Generator (550 hp)

This emissions unit is a stationary CI RICE that has a maximum engine rating of 550 bhp at 100% load. The electrical generator has a nominal power rating of 200 kW. This emergency generator is located at the Leachate Building.

The following table provides important details for the engines collectively regulated as EU 013:

<b>Engine Identification</b>	<b>Engine Brake hp</b>	<b>Date of Construction</b>	<b>Model Year</b>	<b>Displacement liters/cylinder (l/c)</b>	<b>Engine Manufacturer</b>	<b>Model No.</b>
Leachate Building Emergency Diesel Engine	550 (200 kW)	Pre-2005	Pre-2005	2.4	Caterpillar	D-343

*{Permitting Note: This CI RICE is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is not used for fire pumps. This RICE is exempted from regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary ICE based on the manufacturer date. This is an "existing" stationary CI RICE with a site rating of more than 500 HP, with a displacement of less than 10 liters per cylinder that is located at an area source of HAP and has not been modified or reconstructed after 6/12/2006.}*

**Essential Potential to Emit (PTE) Parameters**

**D.1. Hours of Operation.**

- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6640(f)(1)]
- b. *Other Situations.* You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs **D.1.b.(1)** through **(3)** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs **D.1.c.** of this section counts as part of the 100 hours per calendar year allowed by this paragraph **D.1.b.**
  - (1) *Maintenance and Testing.* Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6640(f)(2)(i)]
  - (2) *Emergency Demand Response.* Each RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6640(f)(2)(ii)]
  - (3) *Voltage or Frequency Deviations.* Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6640(f)(2)(iii)]
- c. *Non-emergency Situations.* These RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection D. Emissions Unit 013

the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6640(f)(3)]

#### **D.2. Work or Management Practice Standards.**

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6603 & Table 2d.4.a.]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6603 & Table 2d.4.b.]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6603 & Table 25.4.c.]
- d. *Operation and Maintenance.* Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
- e. *Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6625(h)]
- f. *Oil Analysis.* The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6625(i)]

#### **Monitoring of Operations**

- D.3. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6625(f)]

#### **Compliance**

- D.4. Continuous Compliance.** Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6605(a)]
- D.5. Operation and Maintenance of Equipment.** At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results,

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection D. Emissions Unit 013

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review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6605(b)]

#### **Recordkeeping Requirements**

**D.6. Notification, Performance and Compliance Records.** The owner or operator must keep:

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. Records of the occurrence and duration of each malfunction of operation.
- c. Records of all required maintenance performed on the hour meter.
- d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **D.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- e. Records of the actions required in Specific Condition **D.2.d.** to show continuous compliance with each emission limitation or operating requirement.
- f. Records of the Work or Management Practice Standards specified in Specific Condition **D.2.**
- g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
- h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.

[Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63.6655]

**D.7. Record Retention.**

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[Rule 62-204.800(11), F.A.C.; and 40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

#### **Reporting Requirements**

**D.8. Delay of Performing Work Practice Requirements.** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition **D.2.**, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [Rule 62-204.800(11)(b)82, F.A.C.; and 40 CFR 63, Subpart ZZZZ, Table 2d, footnote 2]

**SECTION IV. APPENDICES.**

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**The Following Appendices Are Enforceable Parts of This Permit:**

Appendix A, Glossary.

Appendix I, List of Insignificant Emissions Units and/or Activities.

Appendix NESHAP, Subpart A of 40 CFR 61 – General Provisions.

Appendix NESHAP, Subpart M – National Emission Standards for Asbestos.

Appendix NESHAP, Subpart A of 40 CFR 63 – General Provisions.

Appendix NESHAP, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste (MSW) Landfills.

Appendix NESHAP, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines.

Appendix NSPS, Subpart A of 40 CFR 60 – General Provisions.

Appendix NSPS, Subpart WWW – Standards of Performance for MSW Landfills.

Appendix NSPS, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

Appendix U, List of Unregulated Emissions Units and/or Activities.