Martin County Utilities & Solid Waste Department
Palm City II Sanitary Landfill

Facility ID No. 0850120
Martin County

Title V Air Operation Permit Renewal

Permit No. 0850120-006-AV
(Renewal of Title V Air Operation Permit No. 0850120-005-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: (850) 717-9000
Fax: (850) 717-9097

Compliance Authority:

Department of Environmental Protection
Southeast District Office
400 North Congress Avenue, 3rd Floor
West Palm beach, Florida 33401

Telephone: (561) 681-6600
Fax: (561) 761-6790

Title V Air Operation Permit Renewal

Permit No. 0850120-006-AV

Table of Contents

Section **Page Number**

Placard Page 1

I. Facility Information.
- A. Facility Description. 2
- B. Summary of Emissions Units. 2
- C. Applicable Regulations. 2

II. Facility-wide Conditions. 4

III. Emissions Units and Conditions.
- A. EU 001 - Municipal Solid Waste Landfill (closed). 7
- B. EU 002 - 2,000 scfm Non-assisted Open Flare. 20
- C. EU 003 – Three Emergency Generators. 29

IV. Appendices (Enforceable Permit Content). ..... See Appendix Document
- Appendix A, Glossary.
- Appendix I, List of Insignificant Emissions Units and/or Activities.
- Appendix RR, Facility-wide Reporting Requirements.
- Appendix TR, Facility-wide Testing Requirements.
- Appendix TV, Title V General Conditions.

Referenced Attachment (Informational Only). ..... At End of Section IV. in Appendix Document
- Table H, Permit History.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE:
Martin County Utilities and Solid Waste Department
P.O. Box 9000
Stuart, Florida 34995-9000

Permit No. 0850120-006-AV
Martin County Palm City II Sanitary Landfill
Facility ID No. 0850120
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 Palm City II Sanitary Landfill is located in Martin County at 9101 SW Busch Street, Palm City. UTM Coordinates are: Zone 17, 561.11 km East and 3006.63 km North. Latitude is: 27°, 10' 51.49" North; and, Longitude is: 80°, 22', 50" 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.

0850120-006-AV Effective Date: July 3, 2014
Renewal Application Due Date: November 20, 2018
Expiration Date: July 3, 2019

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

JFK/dr/jh

Subsection A. Facility Description.

The Martin County Palm City II Sanitary Landfill was designed as a Class I municipal solid waste (MSW) disposal facility (landfill) having a capacity equal to or greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The landfill commenced construction in 1985 and has not been modified or reconstructed. The facility started receiving waste the same year, and ceased receiving waste in February 2005; the landfill achieved final closure in July 2006. Landfill gas emissions are controlled by a non-assisted open flare. The collection and control system began operation on June 15, 1999. The original 600 scfm flare that started operation in June 1999 was removed and was replaced with a 2,000 scfm non-assisted open flare on February 3, 2004. The 2007 annual operating report revealed that peak landfill gas production occurred during the year of 2005. This landfill was an active asbestos waste disposal site. The landfill is subject to: 40 CFR 60, Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills; 40 CFR 61, Subpart M – National Emissions Standard for Asbestos; and, 40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

The Martin County Palm City Landfill operates an active municipal waste transfer station on the same property. This activity commenced commercial operation on November 14, 2004. A construction and demolition debris transfer area, and a yard waste grinding operation are also located on the same property.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Municipal Solid Waste Landfill
002	2,000 scfm Non-assisted Open Flare
003	55 HP (41 kW) Diesel-fired Emergency Generator - Scale House
	143 HP (107 kW) Diesel-fired Emergency Generator - Transfer Station
	402.4 HP (303 kW) Diesel-fired Emergency Generator - Flare

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 January 13, 2014, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is not a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A - NSPS General Provisions	001, 002
40 CFR 60.18(b), General Control Device Requirements for Flares	002
40 CFR 60, Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills adopted and incorporated by reference in Rule 62-214.800(9)(c), F.A.C.	001, 002
40 CFR 61, Subpart A – General Provisions	001
40 CFR 61, Subpart M – National Emissions Standard for Asbestos	001
40 CFR 63, Subpart A – NESHAP General Provisions	001, 002, 003

Regulation	EU No(s).
40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills	001, 002
40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C.	003
State Rule Citations	
62-4, F.A.C. - Permits	001, 002, 003
62-4.204, F.A.C. – Air Pollution Control – General Provisions	001, 002, 003
62-204.800(9)(c), F.A.C. - Municipal Solid Waste Landfills. 40 C.F.R. 60, Subpart Cc, Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, adopted and incorporated by reference.	001, 002
62-210, F.A.C. - Stationary Sources - General Requirements	001, 002, 003
62-213, F.A.C. - Operation Permits For Major Sources of Air Pollution	001, 002, 003
62-296, F.A.C. - Stationary Sources - Emission Standards	001, 002, 003
62-297, F.A.C. - Stationary Sources - Emissions Monitoring	001, 002, 003

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. Such controls include the following:

a. Tightly cover or close all VOC containers when they are not in use.
b. Tightly cover all open tanks that contain VOCs when they are not in use.
c. Maintain all pipes, valves, fittings, etc., which handle VOCs in good operating condition.
d. Confine rags used with VOCs to tightly closed, fireproof containers when not in use.
e. 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. 0850120-004-AC, Specific Condition 2.3]

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:

a. Closed landfill is fully vegetated with sod, with the exception of maintenance roads.
b. Roadways and parking areas leading into the site have been paved.
c. Vegetative debris handling areas are paved. The Palm City II site currently only acts as a transfer station for vegetative debris and no longer processes the material onsite. However, should mulching become necessary again, previous precautions will resume including water being sprayed on the vegetative debris to be mulched, and a water mist curtain being used whenever mulching is in process. Mulching will be suspended whenever the wind speed at the site exceeds 15 mph sustained wind speed for one-half hour, as measured by the onsite wind speed measuring device. The mesh screen installed along the west side of the site for fugitive dust control during mulching remains in place.
d. The C&D transfer area is paved and water is sprayed when dry windy conditions exist. All C&D debris processing including grinding is done indoors.
e. Landscaping and vegetation planting has been strategically employed to reduce particulate emissions on the site.
f. Application of water or chemicals to control emission from such activities as demolition of buildings, grading roads, construction, and land clearing.

g. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
h. 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.
i. Confining abrasive blasting where possible.

[Rule 62-296.320(4)(c), F.A.C.; Permit No. 0850120-004-AC, Specific Condition 2.4; and, proposed by applicant in Title V air operation permit renewal application received January 1, 2014.]

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 1st 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.}

{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]

Other Requirements

FW9. Closure of Landfill. The owner or operator is no longer subject to the requirement to maintain a Title V air operation permit for the landfill if the landfill is not otherwise subject to the requirements of 40 CFR 70 and if the owner or operator meets the conditions for control system removal specified in Specific Condition **A.5.** [Rule 62-204.800, F.A.C.; 40 CFR 60.32c(d) and 40 CFR 60.752(d)]

{Permitting Note: The Department received the Certification of Closure Completion on August 24, 2006.}

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

EU No.	Brief Description
001	Municipal Solid Waste Landfill

Emissions Unit 001 is a closed municipal solid waste landfill, which began receiving waste in 1985, and ceased receiving waste in February of 2005. The landfill achieved closure status in July of 2006, but continues to maintain and operate an active landfill gas collection system, gas mover equipment, and flare (see Emissions Unit 002) for the control of the landfill gas still being generated by the closed landfill.

{Permitting Note: This emissions unit is regulated pursuant to Rule 62-204.800(9)(c), F.A.C., into which the emissions guidelines contained in NSPS 40 CFR Part 60, Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, were adopted and incorporated by reference. This landfill is not an affected facility subject to NSPS 40 CFR Part 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills (adopted and incorporated by reference in Rule 62-204.800(8)(b)74, F.A.C.) due to the age of the landfill; however, the emissions guidelines for existing facilities require the affected facilities to comply with several of the requirements contained in Subpart WWW, by reference. This emissions unit is also regulated under NESHAP 40 CFR Part 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (adopted and incorporated by reference in Rule 62-204.800(11)(b)59., F.A.C.) and 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos (adopted and incorporated by reference in Rule 62-204.800(10)(b)8., F.A.C.), but only to the extent that Subpart M regulates closed landfills that once received asbestos containing waste. Compliance with 40 CFR 63, Subpart AAAA is met by complying with the 40 CFR 60, Subpart Cc requirements contained in Rule 62-204.800(9)(c), F.A.C.}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. The gas collection system feeding gas to the flare may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Control Technology

A.2. Gas Collection System. The owner shall maintain and operate a collection and control system that captures the gas generated within the landfill and route all the collected gas to a control system that complies with the requirements in **Specific Condition B.5.** through **B.7.** The collection system shall be maintained to meet the following original design requirements:

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:
   (1) 5 years or more if active; or
   (2) 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.

[Rule 62-204.800(9)(c)3., F.A.C.; 40 CFR 60.752(b)(2)(ii)(A) & 752(b)(2)(iii)(A); and, 40 CFR 63.1955(b)

{Permitting Note: A collection and control system was installed in accordance with 40 CFR 60.752(b)(2)(ii)(A), with the collected gas being routed to an open flare that was designed and is operated in accordance with 40 CFR 60.752(b)(2)(iii (A). The Department received the Certification of Completion on June 25, 1999}

Operational Requirements

A.3. Operation of Gas Collection System. The Gas collection system shall be maintained and operated as follows:

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 until the requirements of **Specific Condition A.5.** have been met.

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 semi-annual reports as provided in **Specific Condition A.15.**;
   (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 Administrator;

c. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen 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.
   (2) The oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
      (a) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
      (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 ±10 percent.

d. Operate the collection system so that the methane concentration is less than 500 parts per million 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 **Specific Condition A.2**. 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. (See **Specific Condition B.7**.)

g. If monitoring demonstrates that the operational requirements in paragraphs b., c. or d. of this condition are not met, corrective action shall be taken as specified in Specific Conditions A.4.a.(3) & (4) or A.4.c. If corrective actions are taken as specified in Specific Condition A.4., the monitored exceedance is not a violation of the operational requirements in this permit.

[Rules 62-204.800(9)(c)3.b. & 4.a., F.A.C.; 40 CFR 60.752(b)(2)(iv) & 60.753; and, Permit No. 0850120-004-AC, Specific Condition 2.1]

A.4. Compliance Provisions.

a. The specified methods in paragraphs a.(1) through a.(4) shall be used to determine whether the gas collection system is in compliance with **Specific Condition A.2.**

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with **Specific Condition A.2.a**., one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 40 CFR. 60.754(a), 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. Link to 40 CFR 60.754(a)

(a) 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, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
t = age of the landfill at equipment installation plus 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 = O and $e^{-kc} = 1$)

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

$$Q_M = \sum_{i=1}^{n} 2\,k\,L_o\,M_i\left(e^{-kt_i}\right)$$

View or download PDF

where,

Q_M = maximum expected gas generation flow rate, cubic meters per year
k=methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the ith section, megagrams
t_i = age of the ith section, years

(c) 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 paragraphs a.(1)(a) and a.(1)(b). 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 paragraphs a.(1)(a) or a.(1)(b) 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.

(2) For the purposes of determining sufficient density of gas collectors for compliance with **Specific Condition A.2.b**., the owner or operator shall operate and maintain a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with **Specific Condition A.2.c**., 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 in **Specific Condition A.3.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 exceedences of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(4) 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 oxygen as provided in **Specific Condition A.3.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 exceedences of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

b. For purposes of compliance with **Specific Condition A.3.a**., the owner or operator shall maintain each well or design component as specified in the original approved design.

c. The following procedures shall be used for compliance with the surface methane operational standard as required in **Specific Condition A.3.d**.

(1) 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 **Specific Condition A.11.**

(2) 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.

(3) 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 of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs (a) through (e) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of **Specific Condition A.3.d**.

(a) The location of each monitored exceedance shall be marked and the location recorded.

(b) 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.

(c) 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 paragraph (e) of this condition shall be taken, and no further monitoring of that location is required until the action specified in paragraph (e) has been taken.

(d) 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 paragraph (b) or (c) of this condition shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million 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 paragraph (c) or (e) shall be taken.

(e) For any location where monitored methane concentration equals or exceeds 500 parts per million 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 Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rules 62-204.800(9)(c)3.b. & 4.b., F.A.C.; and, 40 CFR 60.752(b)(2)(iv) & 60.755]

A.5. Removal of Collection and Control System. The collection and control system may be capped or removed provided that all the requirements of this condition are met:

a. The landfill shall be a closed landfill as defined in 40 CFR 60.751;

{Permitting Note: From 40 CFR 60.751 - Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under §60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. The Department received the closure report required by 40 CFR 60.757(d) on August 24, 2006.}

b. The collection and control system shall have been in operation a minimum of 15 years; and

c. The calculated non-methane organic compounds (NMOC) gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart. The owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed using the following equation:

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

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(1) 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. Link to 40 CFR 60 Appendices

(2) The average NMOC concentration, CNMOC, 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 Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane. Link to 40 CFR 60 Appendices

(3) 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 Administrator.

[Rule 62-204.800(9)(c)3.b., F.A.C.; and, 40 CFR 60.752(b)(2)(v) & 60.754(b)]

*{Permitting Note: You are no longer required to comply with the requirements of 40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, when you are no longer required to apply controls as specified in **Specific Condition A.3.**}*

A.6. Standards for Inactive Asbestos Waste Disposal Site. Because this closed landfill contains asbestos-containing waste material, the owner or operator shall:

a. Comply with one of the following:

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or
(2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, non-asbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or
(3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted non-asbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or
(4) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (1), (2) or (3) of this condition. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

b. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph a.(2) or a.(3) of this condition.
(1) Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:
(a) Be posted in such a manner and location that a person can easily read the legend; and
(b) (Conform to the requirements for 51 cm×36 cm (20″×14″) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
(c) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	**Notation**
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.
(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.
(3) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

c. The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of paragraph a. or b. of this condition.

d. Notify the Administrator 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 under this section, and follow the procedures specified in the notification. (See **Specific Condition A.14**.) 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 Administrator 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:
(1) Scheduled starting and completion dates.
(2) Reason for disturbing the waste.

(3) (3) 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 Administrator may require changes in the emission control procedures to be used.
(4) (4) Location of any temporary storage site and the final disposal site.

e. Within 60 days of a site becoming inactive and after the effective date of this subpart, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:
(1) The land has been used for the disposal of asbestos-containing waste material;
(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in §61.154(f) have been filed with the Administrator; and
(3) The site is subject to 40 CFR Part 61, Subpart M.

[40 CFR 61.151 & 154(g)]

A.7. Operation and Maintenance Requirements. At all times, including periods of startup, shutdown, and malfunction, 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. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in **Specific Condition A.8.**, review of operation and maintenance records, and inspection of the source.

a. Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
b. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[40 CFR 63.1955(c) and 40 CFR 63.6(e)(1)]

A.8. Startup, Shutdown and Malfunction Plan.

a. The owner or operator must develop and retain a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. The purpose of the startup, shutdown, and malfunction plan is to:
(1) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph a.;
(2) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(3) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

b. When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5). Link to 40 CFR 63.10

c. If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator). Link to 40 CFR 63.10

d. The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph f., the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, Subpart A, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

e. To satisfy the requirements of this condition to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans

meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

f. Based on the results of a determination made under **Specific Condition A.7.**, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
   (1) Does not address a startup, shutdown, or malfunction event that has occurred;
   (2) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by **Specific Condition A.7.**;
   (3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
   (4) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR 63.2 - Definitions.

g. The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this permit or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by **Specific Condition A.15.** If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

h. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established above shall not be deemed to constitute revisions to this Title V air operation permit and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in 40 CFR 70.2. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

[40 CFR 63.6(e)(3), 40 CFR 63.10(d)(5), 40 CFR 63.1955(c), and 40 CFR 63.1960]

Excess Emissions

A.9. Startup, Shutdown, or Malfunction. The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. In addition, this emissions unit shall comply with the start-up, shutdown, or malfunction requirements contained in 40 CFR 63, Subpart A (see **Specific Conditions A.7.**, **A.8.** and **A.19.**). [Rule 62-204.800(9)(c)3.b., F.A.C.; 40 CFR 60.752(b)(2)(iv) & 60.755(e); and, 40 CFR 63.1955(c)]

Monitoring of Operations

A.10. Temperature Monitoring. The owner or operator shall maintain and operate 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 **Specific Condition A.4.a.(3)**; and
b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in Specific Condition A.4.a.(4); and
c. Monitor temperature of the landfill gas on a monthly basis as provided in **Specific Condition A.4.a.(4)**.

[Rules 62-204.800(9)(c)3.b. & 4.c., F.A.C.; and, 40 CFR 60.752(b)(2)(iv) & 60.756(a)]

A.11. Surface Methane Concentration Monitoring. The owner or operator shall monitor surface concentrations of methane according to the following instrument specifications and procedures:

a. *Portable Analyzer.* 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. *Calibration Gas.* The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
c. *Performance Evaluation.* 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. *Calibration Procedures.* 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.

Any closed landfill that has no monitored exceedences 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. [Rules 62-204.800(9)(c)3.b. & 4.c., F.A.C.; and, 40 CFR 60.752(b)(2)(iv), 60.755(d) & 60.756(f)] Link to 40 CFR 60 Appendices

Recordkeeping and Reporting Requirements

A.12. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Equipment Removal Report	30 Days Prior to removal	**A.13.**
Asbestos Disturbance Notice	45 Days Prior to Disturbance	**A.14.**
Semi-annual Reports	Every 6 Months	**A.15.**

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

A.13. Equipment Removal Report. The owner or operator shall submit an equipment removal report to the Administrator 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 megagrams or greater of NMOC per year.
b. The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in **Specific Condition A.5.** have been met.

[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.757(e); and, 40 CFR 63.1980(a)]

A.14. Asbestos Disturbance Notification. The owner or operator must notify the compliance office 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. (See **Specific Condition A.6.d**.) 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 compliance office 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 Administrator may require changes in the emission control procedures to be used.
d. Location of any temporary storage site and the final disposal site

[40 CFR 61.154(j)]

A.15. Semi-annual Reports. The owner or operator must submit compliance reports every 6 months as specified in paragraphs a. through f., 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.

a. Value and length of time for exceedance of applicable parameters monitored under **Specific Conditions A.10.** and **A.11.**
b. All periods when the collection system was not operating in excess of 5 days.
c. The location of each exceedance of the 500 parts per million methane concentration as provided in **Specific Condition A.3.**d. and the concentration recorded at each location for which an exceedance was recorded in the previous month.
d. The date of installation and the location of each well or collection system expansion added pursuant to **Specific Condition A.4.**

[[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.757(f), 40 CFR 63.1955(b) & (c) and 40 CFR 63.1980(a)]

{Permitting Note: 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 paragraphs (a) and (b).

(a) 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.
(b) A deviation occurs when a SSM plan is not developed or maintained on site.}

{Permitting Note: 3-hour block averages are calculated in the same way as they are calculated in 40 CFR 60, Subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) are not to be included in any average computed under this subpart:

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
(b) Startups.
(c) Shutdowns.
(d) Malfunctions.}

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

A.17. Records - Lifetime. The owner or operator shall keep the following records up-to-date and readily accessible for the life of the collection system, as measured during the initial performance test or compliance determination:

a. Records of the collection system vendor specifications shall be maintained until removal.

b. The maximum expected gas generation flow rate as calculated in Specific Condition **A.4.** The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
c. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices according to the original design.
d. A plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
e. Records of the installation date and location of all installed collectors.
f. Documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii). Link to 40 CFR 60.759
g. A copy of the startup, shutdown and maintenance (SSM) plan must be maintained on site. Failure to maintain a copy of the SSM plan is a deviation from the requirements of this permit.

[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.758(b) & (d); and, 40 CFR 63.1955(c) & 63.1960]

A.18. Records – 5 year minimum. The owner or operator shall keep the following records up-to-date and readily accessible for a minimum of 5 years:
a. Records of subsequent tests or monitoring.
b. Records of all collection and control system exceedences of the operational standards in **Specific Condition A.3.**, 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(9)(c)5., F.A.C. and 40 CFR 60.758(b) & (e)]

Other Requirements

A.19. 40 CFR 63, Subpart A – General Provisions. In addition to the above requirements, the owner or operator must also comply with the following requirements contained in 40 CFR 63, Subpart A - General Provisions. Link to 40 CFR 63, Subpart A

Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.

Citation	Description	Explanation
63.10(b)(2)(i)-(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

[40 CFR 63.1955(b) and Table 1 of Subpart AAAA]

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

EU No.	Brief Description
002	2,000 scfm Non-assisted Open Flare

Emissions Unit 002 is a 2,000 scfm non-assisted open flare manufactured by LFG Specialties (model No. CF103018.) with a heat input rate of 60 MMBtu/hour. This control device was installed on February 03, 2004 in accordance with construction permit No. 0850120-004-AC.

The flare stack height is 33 feet with an exit diameter of 10 inches. The outlet gas temperature is 1400°F, the actual volumetric flow rate is 117,712 cubic feet per minute (acfm), the dry standard flow rate is 31,905 cubic feet per minute (dscfm), and it operates at a landfill gas (LFG) flow rate up to 2,000 scfm.

{Permitting Note: This emissions unit is regulated pursuant to Rule 62-204.800(9)(c), F.A.C., into which the emissions guidelines contained in NSPS 40 CFR Part 60, Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, were adopted and incorporated by reference. This landfill is not an affected facility subject to NSPS 40 CFR Part 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills (adopted and incorporated by reference in Rule 62-204.800(8)(b)74, F.A.C.) due to the age of the landfill; however, the emissions guidelines for existing facilities require the affected facilities to comply with several of the requirements contained in Subpart WWW, by reference. This emissions unit is also regulated under NESHAP 40 CFR Part 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (adopted and incorporated by reference in Rule 62-204.800(11)(b)59., F.A.C.) Compliance with 40 CFR 63, Subpart AAAA is met by complying with the 40 CFR 60, Subpart Cc requirements contained in Rule 62-204.800(9)(c), F.A.C.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum landfill gas flowrate to the flare shall not exceed 2,000 standard cubic feet per minute of landfill gas, averaged hourly. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0850120-004-AC]

B.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Control Technology

B.4. Open Flare. The owner or operator shall maintain and operate an open flare designed to combust and control landfill gases delivered by the gas collection system regulated in Subsection A. of this permit. The flare shall be operated according to the provisions listed below. [Rule 62-204.800(9)(c)3.; 40 CFR 60.18; 40 CFR 60.752(b)(2)(iii)(A)]

Operational Requirements

B.5. Control Device Requirements. The owner or operator shall comply with the following requirements for flares:

a. Flares shall be designed for and operated with no visible emissions as determined by Method 22 of 40 CFR 60, Appendix A, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Link to 40 CFR 60 Appendices
b. Flares shall be operated with a flame present at all times, as determined by the methods specified in Specific Conditions **B.13.** & **B.18.**

c. Flares shall be used only 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 shall be determined by the methods specified in Specific Conditions **B.18.** & **B.19.**
d. Non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified Specific Condition **B.18.d**., less than the velocity, V_{max}, as determined by the method specified in Specific Condition **B.18.e**., and less than 122 m/sec (400 ft/sec) are allowed.

[Rule 62-204.800(9)(c), F.A.C.; 40 CFR 60.18(c), 60.752(b)(2)(iii)(A) & 60.752(b)(2)(iv); and, Permit No. 0850120-004-AC, Specific Condition 1.2]

B.6. General Control Device and Work Practice Requirements. Owners or operators of flares used to comply with the provisions of 40 CFR 60 shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [Rule 62-204.800(9)(c), F.A.C.; 40 CFR 60.18(d) & 60.752(b)(2)(iii)(A); and, Permit No. 0850120-004-AC, Specific Conditions 1.3]

B.7. Flare Operation. Flares used to comply with provisions of this subpart shall be operated at all times when the collected gas is routed to the system. [Rule 62-204.800(9)(c), F.A.C.; 40 CFR 60.18(e), 60.752(b)(2)(iv)(A) & 60.753(f); and, Permit No. 0850120-004-AC, Specific Conditions 1.4 & 2.2]

B.8. Removal of Collection and Control System. The collection and control system may be capped or removed provided that all the requirements of Specific Condition **A.5.** are met. [Rule 62-204.800(9)(c)3.b., F.A.C.; and, 40 CFR 60.752(b)(2)(v) & 60.754(b)]

B.9. Operation and Maintenance Requirements. At all times, including periods of startup, shutdown, and malfunction, 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. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in Specific Condition **B.10.**, review of operation and maintenance records, and inspection of the source.

a. Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
b. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[40 CFR 63.1955(c) and 40 CFR 63.6(e)(1)]

B.10. Startup, Shutdown and Malfunction Plan.

a. The owner or operator must develop and retain a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an

applicable emission limitation in the relevant standard. The purpose of the startup, shutdown, and malfunction plan is to:

(1) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph a.;
(2) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
(3) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

b. When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5). Link to 40 CFR 63.10

c. If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator). Link to 40 CFR 63.10

d. The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph f., the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, Subpart A, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such

a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

e. To satisfy the requirements of this condition to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

f. Based on the results of a determination made under Specific Condition **B.9.**, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
   (1) Does not address a startup, shutdown, or malfunction event that has occurred;
   (2) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by Specific Condition **B.9.**;
   (3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
   (4) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR 63.2 - Definitions.

g. The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this permit or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by Specific Condition **B.23.** If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

h. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established above shall not be deemed to constitute revisions to this Title V air operation permit and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in 40 CFR 70.2. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

[40 CFR 63.6(e)(3), 40 CFR 63.10(d)(5), 40 CFR 63.1955(c), and 40 CFR 63.1960]

<u>Emission Limitations and Standards</u>

B.11. <u>Visible Emissions</u>. As determined by Method 22 of 40 CFR 60, Appendix A, Visible emissions are not allowed from this flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

[Rule 62-204.800(9)(c)(3); 40 CFR 60.18 & 60.752(b)(2)(iii)(A); and, Permit No. 0850120-004-AC, Specific Condition 1.2]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

B.12. Startup, Shutdown, or Malfunction. The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. In addition, this emissions unit shall comply with the start-up, shutdown, or malfunction requirements contained in 40 CFR 63, Subpart A (see Specific Conditions **B.9.**, **B.10.** & **B.27.**). [Rule 62-204.800(9)(c)3.b., F.A.C.; 40 CFR 60.752(b)(2)(iv) & 60.755(e); and, 40 CFR 63.1955(c)]

Monitoring of Operations

B.13. Flare Monitoring Requirements. The owner or operator 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(9)(c)3.b., F.A.C.; 40 CFR 60.752(b)(2)(iv) & 60.756(c) ; and, Permit No. 0850120-004-AC, Specific Conditions 1.5 & 4.1]

Test Methods and Procedures

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

Method	Description of Method and Comments
3C	Determination of Carbon Monoxide, Methane, Nitrogen, and Oxygen From Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares

The above method is 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., Permit No. 0850120-004-AC, Specific Condition 1.5]

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.]

B.16. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), the flare shall be tested to demonstrate compliance with the emissions standards for visible emissions using Reference Method 22 of 40 CFR 60, Appendix A. The observation period is 2 hours. [Rule 62-297.310(7), F.A.C. and Permit No. 0850120-004-AC, Specific Condition 1.5]

B.17. Annual Determination of Flare Exit Velocity. The owner or operator shall annually determine and report the actual exit velocity of each flare using the methods specified in Specific Condition **B.18.d**. The actual exit velocity shall be reported to the Department as an attachment to the facility's annual report. [Permit No. 0850120-004-AC, Specific Condition 3.1]

B.18. Testing and Operational Requirements.

a. Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

b. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

c. The net heating value of the gas being combusted in a flare shall be calculated using the following equation (see also Specific Condition **B.17.**):

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

View or download PDF

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 25ºC and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20ºC;

K = Constant, 1.740×10^{-7} (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) 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 ASTM D1946–77 (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 25ºC and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.

d. 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.

e. The maximum permitted velocity, V_{max}, for flares complying with Specific Condition **B.5.**d. shall be determined by the following equation.

$$\mathbf{Log10\ (V_{max})=(H_T+28.8)/31.7}$$

Where:

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

H_T = The net heating value as determined in paragraph c. of this condition.

[Rule 62-204.800(9)(c)3.b., F.A.C.; 40 CFR 60.18(f), 60.752(b)(2)(iii)(A) & 60.756(c) ; and, Permit No. 0850120-004-AC, Specific Conditions 1.5]

B.19. Net Heating Value of Landfill Gas. For the performance test required in Specific Condition **B.18.**, the net heating value of the combusted landfill gas as determined in Specific Condition **B.18.c**. is calculated from the concentration of methane in the landfill gas as measured by Method 3C of 40 CFR 60, Appendix A. 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 Specific Condition **B.18.d**.

[Rule 62-204.800(9)(c)3.b., F.A.C.; 40 CFR 60.18, 60.752(b)(2)(iii)(A) & 60.754(e)] Link to 40 CFR 60 Appendices

B.20. Compliance Requirements for 40 CFR 63 Subpart AAAA "National Emission Standards for Hazardous Air Pollutants: Municipal Waste Landfills". Compliance is determined in the same way it is determined for 40 CFR Part 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 Specific Condition **B.13.**, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the facility has failed to meet the control device operating conditions described in this permit and has deviated from the requirements of this permit. Finally, the facility must develop and implement a written SSM plan according to the provisions in Specific Condition **B.10.** 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 this subpart. [40 CFR 63.1960 and Permit No.0850120-004-AC, Specific Condition 8.3]

Recordkeeping and Reporting Requirements

B.21. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Equipment Removal Report	30 Days Prior to Removal	**B.22.** & **A.5.**
Semi-annual Reports	Every 6 Months	**B.23.**

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

B.22. Equipment Removal Report. The owner or operator shall submit an equipment removal report to the Administrator 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 megagrams or greater of NMOC per year.
b. The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in Specific Condition A.5. have been met.

[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.757(e); and, 40 CFR 63.1980(a)]

B.23. Semi-annual Reports. The owner or operator must submit compliance reports every 6 months as specified in paragraphs a. through f., 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.

a. Value and length of time for exceedance of applicable parameters monitored under Specific Condition **B.13.**
a. 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 Specific Condition **B.13.**
b. 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.

[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.757(f); 40 CFR 63.1955(b) & (c); 40 CFR 63.1980(a); and, Permit No. 0850120-004-AC, Specific Condition 5.3]

{Permitting Note: 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 paragraphs (a) through (c).

*(a) A deviation occurs when the control device operating parameter boundaries described in Specific Condition **B.13.** 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.}

{Permitting Note: 3-hour block averages are calculated in the same way as they are calculated in 40 CFR 60, Subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) are not to be included in any average computed under this subpart:
(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
(b) Startups.
(c) Shutdowns.
(d) Malfunctions.}

B.24. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

B.25. Records - Lifetime. The owner or operator shall keep the following records up-to-date and readily accessible for the life of the flare, as measured during the initial performance test or compliance determination:
a. Records of the flare vendor specifications shall be maintained until removal.
b. The flare type (i.e., steam-assisted, air-assisted, or non-assisted).
c. All visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test specified in Specific Condition **B.18.**
d. 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.
e. A copy of the startup, shutdown and maintenance (SSM) plan must be maintained on site. Failure to maintain a copy of the SSM plan is a deviation from the requirements of this permit.
[Rule 62-204.800(9)(c)5., F.A.C.; 40 CFR 60.758(b)(4); 40 CFR 63.1955(c) & 63.1960; and, Permit No. 0850120-004-AC, Specific Condition 6.1]

B.26. Records – 5 Year Minimum. The owner or operator shall keep the following records up-to-date and readily accessible for a minimum of 5 years:
a. Records of subsequent tests or monitoring.
b. Continuous records of the equipment operating parameters specified to be monitored in Specific Condition **B.13.**
c. Records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
d. 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 Specific Condition **B.13.b**.
e. Continuous records of the flame or flare pilot flame monitoring specified under Specific Condition **B.13.a**., 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(9)(c)5., F.A.C. and 40 CFR 60.758(b)(c) & (e); and, Permit No. 0850120-004-AC, Specific Condition 6.2]

Other Requirements

B.27. 40 CFR 63, Subpart A – General Provisions. In addition to the above requirements, the owner or operator must also comply with the following requirements contained in 40 CFR 63, Subpart A - General Provisions. Link to 40 CFR 63, Subpart A

Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i) -(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

[40 CFR 63.1955(b)]

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

ID No.	Emission Unit Description
003	55 HP (41 kW) Diesel-fired Emergency Generator - Scale House
	143 HP (107 kW) Diesel-fired Emergency Generator - Transfer Station
	402.4 HP (303 kW) Diesel-fired Emergency Generator - Flare

Emissions Unit 003 consists of three diesel engine-driven emergency generators. These engines fire ultra low sulfur diesel fuel.

The following table provides pertinent details for these engines:

Engine Identification	Engine Brake HP	Date of Manufacture	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Scale House	55	2002	2002	3.9 (4 cylinder) 0.98 l/c	Cummins	32DGBC
Transfer Station	143	2004	2004	5.9 (6 cylinder) 0.98 l/c	Cummins	85DGDB
Flare	402.4	1996	1996	14.64 (6 cylinder) 2.44 l/c	Caterpillar	DM2267 3406C

{Permitting Notes: These compression ignition reciprocating internal combustion engines (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. This permit section addresses "existing" emergency stationary CI RICE emergency generator engines less than or equal to 500 HP with a displacement of less than 10 liters per cylinder that are located at an area source of HAPs and that commenced construction before 6/12/2006; and, that have not been modified or reconstructed after this date.

Pursuant to Subpart IIII, NSPS for Stationary Compression Ignition RICE, these are "existing" emergency engines that commenced construction (ordered) before 7/11/2005 and that have not been modified or reconstructed after 7/11/2005. Therefore, they are not subject to Subpart IIII.}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [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 b.(1) through (3) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(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. [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. [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. [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 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. [40 CFR 63.6640(f)(3)]

C.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & 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. [40 CFR 63.6603(a) & 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. [40 CFR 63.6603(a) & Table 2d.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. [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. [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. [40 CFR 63.6625(i)]

Monitoring of Operations

C.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance

C.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

C.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, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Reporting Requirements

C.6. 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 **C.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. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

Recordkeeping Requirements

C.7. 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. [40 CFR 63.6655(a)(1)]
b. Records of the occurrence and duration of each malfunction of operation. [40 CFR 63.6655(a)(2)]
c. Records of all required maintenance performed on the hour meter. [40 CFR 63.6655(a)(4)]
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **C.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
e. Records of the actions required in specific condition **C.2.d.** to show continuous compliance with each emission limitation or operating requirement. [40 CFR 63.6655(d)]
f. Records of the Work or Management Practice Standards specified in Specific Condition **C.2.** [Rule 62-213.440(1)(b)2.a., F.A.C.]
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan. [40 CFR 63.6655(e)]
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. [40 CFR 63.6655(f)]

[Rule 62-213.440, F.A.C. and 40 CFR 63.6655]

C.8. 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.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

General Provisions

C.9. 40 CFR 63 Subpart A - General Provisions. The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. Link to 40 CFR 63, Subpart A - General Provisions

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (additional terms defined in 43 CFR 63.6675)
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)-(5)	Initial notifications (except that §63.9(b)(3) is reserved)
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6645(a), 63.6665 & Table 8 to Subpart ZZZZ of Part 63]