Sarasota County Solid Waste Department
Sarasota County Board of County Commissioners
Sarasota County Bee Ridge Landfill

Facility ID No. 1150090
Sarasota County

Title V Air Operation Permit Renewal

Permit No. 1150090-008-AV
(Renewal of Title V Air Operation Permit No. 1150090-005-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Engineering and Permitting Section
South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTH DISTRICT
P.O. BOX 2549
FORT MYERS, FL 33902-2549

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

DRAFT/PROPOSED PERMIT

PERMITTEE:
Sarasota County Solid Waste Department
Sarasota County Board of County Commissioners
4000 Knights Trail Road
Nokomis, FL 34275

Permit No. 1150090-008-AV
Sarasota County Bee Ridge Landfill
Facility Id No. 1150090
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 Sarasota County Bee Ridge Landfill is located in Sarasota County at 8350 Bee Ridge Road, Sarasota, Florida. UTM Coordinates are: Zone 17, 361.95 East and 3020.16 North. Latitude is: 27° 17' 50.9767" North; and, Longitude is: 82° 23' 42.2281" West.

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

Effective Date: DATE, 20xx
Renewal Application Due Date: Exp. DATE -225, 20xx
Expiration Date: Eff. DATE + 5 years, 20xx

(Draft/Proposed)

_____

Jon M. Iglehart
Director of
District Management

JMI/SRM/mf

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility is a closed Class I Landfill with a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The landfill started receiving waste in 1970 and the last phase was closed in 1998. The NMOC emissions from this landfill were at one point calculated to be greater than 50 megagrams (Mg) per year, however, since year 2000 the NMOC emissions have been calculated to be below 50 Mg/year. The landfill does not contain a bioreactor. The landfill has never been an active asbestos waste disposal site. Landfill gas (LFG) emissions are collected and controlled, by a non-assisted open candlestick flare.

The facility is subject to 40 CFR 60 Subpart A – General Provisions, 40 CFR 60 Subpart CC – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills as adopted under Rule 62-204.800(8)(c), F.A.C, 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Municipal Solid Waste (MSW) Landfill
005	Flare
006	Emergency Compression Ignition (CI) Reciprocating Internal Combustion Engine (RICE).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received February 20, 2013, this facility is NOT a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 005, 006
40 CFR 60, Subpart CC – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	001, 005
40 CFR 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills	001, 005
40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	006
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	006
62-296.320, F.A.C.	001, 005, 006
62-210.300, F.A.C.	001, 005, 006
62-213.205, F.A.C.	001, 005, 006
62-4, F.A.C.	001, 005, 006
62-210.370, F.A.C	001, 005, 006
62-213.420, F.A.C.	001, 005, 006
62-213.430, F.A.C	001, 005, 006
62-213.440, F.A.C.	001, 005, 006

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

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

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 percent opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

a. Landscaping and/or planting vegetation.
b. Spraying roads with water.
c. Utilize best management practices for onsite construction projects.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit application received February 20, 2013.]

Annual Reports and Fees

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

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

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

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

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

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

Subsection A. Landfill

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

EU No.	Brief Description
001	MSW Landfill

Emissions unit 001 is a closed MSW Class I Landfill with a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The landfill started receiving waste in 1970. The last phase was closed in 1998. The landfill does not contain a bioreactor. The landfill has never been an active asbestos waste disposal site. Landfill gas (LFG) emissions are collected from extraction wells via an active collection system and routed to a flare (EU005)

{Permitting Note: This emissions unit is regulated under Rules 62-210.300, and 62-213, F.A.C., 40 CFR 60 Subpart A – General Provisions, 40 CFR 60 Subpart CC – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills as adopted under Rule 62-204.800(8)(c), F.A.C, 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

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

A.3. Gas Collection and Control System (GCCS). The active collection system and control device shall meet the following 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.
e. Route all the collected gas to an open flare designed and operated in accordance with 40 CFR 60.18.
f. Be designed to meet the requirements of 40 CFR 60.759.

[40 CFR 60.759, 40 CFR 60.752(b)(2), 40 CFR 60.752(b)(2)(i) thru (iii)]

A.4. Operation. The owner or operator shall operate the collection and control system in accordance with the provisions of 40 CFR 60.753, 40 CFR 60.755 and 40 CFR 60.756. [40 CFR 60.752(b)(2)(iv), Rule 62-204.800(9)(c), F.A.C.]

A.5. Removal of GCCS. The collection and control system may be capped or removed if the following requirements are met:

a. *Definition of Closed Landfill*. The landfill shall be a closed landfill as defined in 40 CFR 60.751 of Subpart WWW.
b. *Closure Report*. A closure report shall be submitted to the Department as provided in 40 CFR 60.757(d) of Subpart WWW;
c. *Minimum Years of Operation*. The collection and control system shall have been in operation minimum of 15 years; and
d. *NMOC*. Following the procedures specified in 40 CFR 60.754(b) of Subpart WWW, the calculated NMOC produced by the landfill shall be less than 50 megagrams per year on three (3) successive test dates. The test dates shall be not less than 90 days apart, and no more than 180 days apart.

[40 CFR 60.752(b)(2)(v)]

A.6. Title V Permitting. When the landfill meets the conditions for control system removal specified in Specific Condition **A.5.** above, the owner or operator is no longer subject to the requirement to maintain a Title V air operating permit if the landfill not otherwise subject to the requirement to Title V permitting. [40 CFR 63.752(d)]

Emission Limitations and Standards

A.7. Methane Concentration. The owner or operator shall operate the system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. [40 CFR 60.753(d)]

Excess Emissions

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

A.8. Excess Emissions Prohibited. The regulations of 40 CFR 60 Subpart WWW shall 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. [40 CFR 60.755(e)]

Operational Standards

A.9. Operational Standards. Except as provided in Appendix ASP, the owner or operator shall comply with the following operational standards for the gas collection and control system:

a. *Operation of Collection System*. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
   (1) 5 years or more if active; or
   (2) 2 years or more if closed or at final grade.

b. *Negative Pressure*. Operate the collection system with negative pressure at each wellhead except under the following conditions:
   (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1);
   (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
   (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;

c. *Interior Wellhead Operating Parameters*. 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, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).
   (2) Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
      i. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
      ii. A data recorder is not required;
      iii. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
      iv. A calibration error check is not required;
      v. The allowable sample bias, zero drift, and calibration drift are ±10 percent.

d. *Methane Concentration Above Background*. 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. *Venting of Gases to Control System*. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

f. *Frequency of Operation*. Operate the control or treatment system at all times when the collected gas is routed to the system.

g. *Corrective Actions*. If monitoring demonstrates that the operational requirements in (b), (c), or (d) of this condition are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 60.755(c) of Subpart WWW. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in this condition.

[40 CFR 60.753]

A.10. Alternative Sampling/Operational Procedures. The owner or operator is authorized to operate the gas collection and control system as described in Appendix ASP - Alternative Sampling/Operational Procedures. [Rule 62-4.070(3), F.A.C., Department letter dated 12/03/2010]

Monitoring of Operations

A.11. Open Flare Operating Requirements. The owner or operator shall calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

a. *Heat Sensing Device*. 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. *Instrument to Record Flow or Bypass of Flare*. 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.

[40 CFR 60.756(c), 40 CFR 60.752(b)(2)(iii)]

A.12. Methane Surface Concentration Monitoring. The owner or operator shall monitor surface concentrations of methane according to the procedures in Specific Condition **A.14.** and according to the instrument specifications and procedures provided in Specific Condition **A.15.**. Any closed landfill that has no monitored exceedances of the operational standard in three (3) 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. [40 CFR 60.756(f)]

Compliance Provisions

A.13. Monthly Measurements. The owner or operator shall install a sampling port and a thermometer, other measuring device, or an access port for temperature measurements at each wellhead and

a. *Gauge Pressure*. Measure the gauge pressure in the gas collection header on a monthly basis, and

(1) If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under Specific Condition **A.9.b**. If negative pressure cannot be

achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval.

b. *Nitrogen or Oxygen Concentration and Temperature*. Monitor nitrogen or oxygen concentration and the temperature in the landfill gas on a monthly basis, and

(1) If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval.

[40 CFR 60.755(a)(3) and (5) and 40 CFR 60.756(a)]

A.14. Surface Methane Operational Standard. The following procedures shall be used for compliance with the surface methane operational standard:

a. 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 paragraph (d) of this section.

b. 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.

c. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of 40 CFR Subpart A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

d. 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 **A.14.d.(1)-(5).** shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

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

(2) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(3) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in **A.14.d.(5)** shall be taken, and no further monitoring of that location is required until the action specified in **A.14.d.(5)** has been taken.

(4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in **A.14.d.(2)** or **A.14.d.(3)** shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring 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 remonitoring shows an exceedance, the actions specified in **A.14.d.(3)** or **A.14.d.(5)** shall be taken.

(5) 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 Department for approval.

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

[40 CFR 60.755(c)]

A.15. Surface Monitoring Instrument Specifications. The owner or operator shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

a. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC.
b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.
d. The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60.755(d)]

A.16. GCCS Compliance Determination. The specified methods in Specific Condition **A.13**. shall be used to determine whether the gas collection system is in compliance with the specification for an active collection system as required by 40 CFR 60.752(b)(2)(ii). [40 CFR 60.755(a)]

Test Methods and Procedures

A.17. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure)
3C	Determination of Carbon Monoxide, Methane, Nitrogen, and Oxygen for Stationary Sources
25C	Determination of Nonmethane Organic Compound (NMOC) in Municipal Solid Waste Landfill Gases

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

A.18. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.19. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.20. NMOC Emission Calculations for Removal of GCCS. The owner or operator shall calculate the NMOC emission rate in accordance with 40 CFR 60.754(b) for purposes of determining when the systems can be removed. [40 CFR 60.754(b)]

Recordkeeping and Reporting Requirements

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

Report	Reporting Deadline	Related Condition(s)
NMOC Emission Rate Report	Annually (See Permitting Note under Specific Condition **A.25**.)	**A.25.**

Closure Report	With 30 days of waste acceptance cessation	**A.26.**
Equipment Removal Report	30 days prior to removal or cessation of operation of control equipment	**A.27.**
Annual Reports	Annual	**A.28.**

[Rule 62-213.440, F.A.C.]

A.22. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

A.23. Deposited Solid Waste Records. The owner or operator shall keep for a least 5 years up-to-date, readily accessible, on-site records of the current amount of solid waste in –place, and the year by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 60.758(a)]

A.24. Control Equipment Records. The owner or operator shall keep up-to-date, readily accessible records for the life of the control equipment of the following data as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

a. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1).
b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
c. The flare type.
d. All visible emission readings.
e. Heat content determination.
f. Flow rate or bypass flow rate measurements.
g. Exit velocity determinations made through the performance tests.
h. Continuous records of pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
i. Continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756.
j. Up-to –date readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
k. 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 (see 40 CFR 60.756.).
l. Continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c) and up-to-date, readily accessible records of all periods of operation in which the flame of flare pilot flame is absent.
m. Plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
n. Records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).
o. 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).
p. Records of all collection and control exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758(b)]

A.25. NMOC Emission Rate Reports. The owner or operator shall submit an NMOC emission rate report to the South District office annually in accordance with 40 CFR 60.757(b). The owner or operation is exempt from

submitting an annual report during such time as the collection and control system is in operation and in compliance with Specific Conditions **A.9., A.13, A.14**. and **A.15**. [40 CFR 60.757(b)]

{*Permitting Note: The facility has a collection and control system in operation. As long as the collection and control system is in compliance with 40 CFR 60.753 and 60.755, an annual NMOC emission rate report is not required to be submitted.*}

A.26. Closure Report. The owner or operator shall submit a closure report to the South District office within 30 days of waste acceptance cessation. [40 CFR 60.757(d)]

A.27. Equipment Removal Report. The owner or operator shall submit an equipment removal report to the South District office 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following information in a. through c. below. The South District 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.

a. *Closure Report*. A copy of the closure report submitted in accordance with Specific Condition **A.26.**
b. *Initial Performance Test Report*. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired.
c. *NMOC Emission Rate Reports*. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year

[40 CFR 60.757(e)]

A.28. Annual Reports. The owner or operator shall submit annual reports in accordance with 40 CFR 60.757(f) of the following recorded information:

a. *Exceedance Value and Time Period*. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).
b. *Diversion of Gas Stream*. 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 in 40 CFR 60.756.
c. *Non-Operational Control Devices*. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
d. *Non-Operational Collection System*. All period when the collection system was not operating in excess of 5 days.
e. *Methane Exceedances*. The location of each exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded the previous month.
f. *Installation of Wells*. The date of install and the location of each well or collection system expansion added pursuant 40 CFR 60.755.
g. *Alternate Sampling/Operational Procedures*. Summaries of proposed alternative LPG collection system operational procedures, records of the details (dates, identification number(s) of affected well(s), descriptions of actions taken, duration of any temporary well shutdowns, wellhead monitoring data, surface monitoring data/effects, etc.) of any remedial actions taken, changes in well status, equipment installations or upgrades, on any LFG collection system extraction well or collection system component per Appendix ASP.

[40 CFR 60.757(f)]

Other Requirements

A.29. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions, 40 CFR 60 Subpart Cc – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills and 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills. [Rules 62-213.440, F.A.C. and 62-204.800(9)(c)]]

Subsection B. Flare

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

EU No.	Brief Description
005	Flare

Emissions unit 005 is a non-assisted open candlestick 3,000 scfm flare (LFG Specialties (Shaw) serial #1581, Model No. PCF1228110). The flare specifications are: exit temperature is 1,400 F, stack height 34 feet, exit diameter 1 feet.

{Permitting Note: This emissions unit is regulated under Rules 62-210.300, and 62-213, F.A.C., 40 CFR 60 Subpart A – General Provisions, 40 CFR 60 Subpart CC – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills as adopted under Rule 62-204.800(8)(c), F.A.C, 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The process rate shall not exceed 3000 scfm of landfill gas. The maximum heat input rate shall not exceed 91 MMBtu/hr. [Rules 62-4.160(2), 62-204.800, 62-210.200(PTE)]

B.2. Methods of Operation. The operation of the flare shall comply with the requirements of 40 CFR 60.18 of Subpart A. [Rule 62-213.410, F.A.C.]

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

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition **B.5.** is based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. The flare shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours. [40 CFR 60.18(c)]

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.6. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

B.7. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares

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

B.8. Common Testing Requirements. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. 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.; 40 CFR 60.18]

B.9. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), the EU shall be tested to demonstrate compliance with the emissions standards for **VE**. [Rule 62-297.310(7), F.A.C.]

B.10. Compliance Tests Prior To Renewal. Compliance tests shall be performed for **VE** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Condition **B.5.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

B.11. Visible Emissions Test Method. Visible emissions testing shall be performed using in accordance with Method 22. The test shall be conducted for a minimum of 30 minutes. [40 CFR 60.18, EPA Region 4 letter dated 3/13/2008]

{Permitting Note. In an EPA (Region IV) letter dated March 13, 2008, EPA approved alternate test method for landfill and similar source categories. EPA approved reduction from 2 hours to 30 minutes for the time to conduct Method 22 for determining VE and the reduction from three 30 minute samples to one thirty minute sample for Method 3C for determining net heat value for gas.}

Recordkeeping and Reporting Requirements

B.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

B.13. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, attached to this permit. [Rule 62-213.440, F.A.C.]

Subsection C. Emergency RICE

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

EU No.	Brief Description
006	Emergency Compression Ignition (CI) Reciprocating Internal Combustion Engine (RICE)

EU006 is a John Deere emergency CI RICE/generator set. The engine/generator is used for emergency power for the Bee Ridge Administration Building. This RICE has no facility emission limits certified by the manufacturer and is not "Blue Sky" series.

The following table provides important details for the engine:

Engine Identification	Engine Brake HP	Date of Purchase	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
EU006	96	10/2011	2011	0.61	John Deere	5030HF285G

{Permitting Notes: This compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This is a "new" stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at an area source of HAP. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ. The owner or operator is complying with Subpart IIII by maintaining the manufacturer certification.}

Essential Potential to Emit (PTE) Parameters

C.1. Authorized Fuel. This RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra low sulfur) for non-road fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

c. *Marking Provisions.* The diesel fuel fired shall be free of marker solvent yellow 124 until November 30, 2014. After December 1, 2014, there are no requirements or restrictions on the use of marker solvent yellow 124.

d. *Use of Existing Fuel*. Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 CFR 60.4207(b), 80.510(c), 80.510(f)(2) & 80.510(f)(7)]

C.2. Restricted Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4243(d)(1)]

b. *Other Situations*. You may operate your emergency stationary RICE for any combination of the purposes specified in Specific Conditions **C.2.b.(1) – (3)** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Specific Conditions **C.2.b.(1) – (3)** counts as part of the 100 hours per calendar year**.**

(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, regional transmission organization or equivalent balancing authority and transmission operator, 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 60.4243(d)(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 60.4243(d)(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. 60.4243(d)(2)(iii)]

c. *Non-emergency Situations*. These RICE may be operated for up to 50 hours per calendar year in nonemergency 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 60.4243(d)(3)]

1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(iv) The power is provided only to the facility itself or to support the local transmission and distribution system.

(v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

C.3. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engines according to the manufacturer's written instructions. In addition, owners and operators may only change those settings that are permitted by the manufacturer. These RICE must be maintained and operated to meet the emissions limits in Specific Conditions **C.4. - C.6.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

Emissions Standards

C.4. NO_X + NMHC Emissions. Emissions of NO_X plus non-methane hydrocarbons shall not exceed 4.7 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112(a)]

C.5. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112(a)]

C.6. PM Emissions. Particulate matter (PM) emissions shall not exceed 0.4 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112(a)]

Testing and Compliance Requirements

C.7. Engine Certification Requirements. The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **C.8.** [40 CFR 60.4211(c)]

C.8. Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

a. *Maintenance Plan*. Keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

b. *Performance Test*. If you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1)]

C.9. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **C.8.**, the following requirements shall be met:

a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. Link to Subpart F

b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in Specific Conditions **C.4.**, **A.5.**, **A.6.** determined from the following equation:

NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 may follow the testing procedures specified in 40 CFR 60.4213, as appropriate.

[40 CFR 60.4212(a) & (c) and 40 CFR 60.4205(e)]

C.10. 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.]

Monitoring Requirements

C.11. Hour Meter. The owner or operator must install a non-resettable hour meter on the engine if one is not already installed. [40 CFR 60.4209(a)]

C.12. Backpressure Monitor. If the engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

Records and Reports

C.13. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

C.14. Diesel Particulate Filter Records. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]

C.15. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition **C.8.**, the owner or operator must keep the following records:

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

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

C.16. Testing Notification. At such time that the requirements of Specific Condition **C.8.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1), F.A.C.]

C.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

C.18. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, attached to this permit. [Rule 62-213.440, F.A.C.]

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Appendix A, Glossary.
Appendix ASP, Alternative Sampling/Operating Procedures
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart CC – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
Appendix NSPS, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills
Appendix NSPS, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.