Polk County Board of County Commissioners
Polk County North Central Landfill

Facility ID No. 1050298
Polk County

Title V Air Operation Permit Renewal

Permit No. 1050298-007-AV
(Renewal of Title V Air Operation Permit No. 1050298-005-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 632-7600
Fax: (813) 632-7668

Compliance Authority:

State of Florida
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FINAL PERMIT

PERMITTEE:
Polk County Board of County Commissioners
Polk County Waste Resource Management
10 Environmental Loop South
Winter Haven, Florida 33880-1069

Permit No. 1050298-007-AV
Polk County North Central Landfill
Facility ID No. 1050298
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 Polk County North Central Landfill is located in Polk County at 7425 Highway 540, Winter Haven, Florida. UTM Coordinates are: Zone 17, 416.81 East and 3100.14 North. Latitude is: 28° 01' 26.1" North; and Longitude is: 81° 50' 46.6" 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: July 5, 2012
Renewal Application Due Date: November 22, 2016
Expiration Date: July 5, 2017

_____

Robert C. Wong
District Air Program Administrator
Southwest District

RCW/nek

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility is engaged in municipal solid waste landfill operations. The North Central Landfill began accepting waste in 1977 in the now closed four unlined Class I areas (EU No. 006) located on the southern portion of the site (unlined Class I Landfill cell Nos. 1-4). Waste was collected in these areas from 1977 through 1985. Solar ignited flares were constructed on unlined Class I cells 2, 3, and 4 in 2008. Waste filling (Class I waste) in the Class I/III landfill began in 1986. In addition to the above closed unlined Class I cells, the landfill includes an active unlined Class III area, a closed unlined Class I/III area, a closed unlined Class III area and three (3) active lined Class I areas (EU No. 001) (single liner Phase I, double liner Phase II, and double liner Phase III) all located in the northern portion of the landfill approximately mid way between the north and south limits of the property. This facility also includes a portable 1000 horsepower maximum diesel engine powered yard waste grinder (EU No. 004) operated by a different owner. The design capacity of the landfill is greater than 2.5 million megagrams (MG) and a Tier 2 non-methane organic compounds (NMOC) emission rate was calculated to exceed 50 MG per year. Three emission units (EU Nos. 008-010) were added to this permit for reciprocating internal combustion engines that are subject to 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 Landfill with an Open Flare
004	Diesel Engine Powered Yard Waste Grinder
006	Closed Unlined Landfill Cell Nos. 2, 3, & 4 with Passive Flares
008	Existing Emergency Stationary CI RICE Engine > 500 HP
009	Two (2) Existing Emergency Stationary CI RICE Engines ≤500 HP
010	Two (2) Existing Non-Emergency Stationary CI RICE Engines ≤300 HP
Unregulated Emissions Units and Activities	
003	Roads and Earthmoving Operations

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received February 21, 2012, 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 Nos.
40 CFR 60, Subpart A, NSPS General Provisions	001 & 006
40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills	001& 006
40 CFR 63, Subpart A - General Provisions	001, 006, 008-010
40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	001& 006
40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	008-010
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All

SECTION II. FACILITY-WIDE CONDITIONS.

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

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

Hours of Operation

FW2. Hours of Operation This facility is allowed to operate continuously (i.e., 8,760 hours/year).
[Rules 62-4.160(2), and 62-210.200 ("Potential to Emit"), F.A.C.; Construction Permit 1050298-003-AC]

Emissions and Controls

FW3. 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.]

FW4. 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. Maintain all pipes, valves, fittings, etc., which handle VOC in good operating condition; and

b. 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.; Construction Permit No. 1050298-004-AC]

FW5. General Visible Emissions - No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.
[Rule 62-296.320(4)(b)1, F.A.C.]

FW6. 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 the following on an as needed basis:

a. application of water to roads as needed;

b. application of water to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing;

c. paving and maintenance of roads, parking areas and yards;

d. removal of particulate matter from roads and other paved areas under the control of the permittee of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne;

e. landscaping or planting of vegetation;

f. posting and enforcing speed limits for vehicles traveling on roadways on site;

g. proper storage and handling of ground yard waste material.

[Rule 62-296.320(4)(c), F.A.C.; Construction Permit No. 1050298-003-AC]

Recordkeeping

FW7. Fugitive Dust Control Recordkeeping - In order to document compliance with the road watering requirement of Specific Condition No. FW6., the permittee shall maintain daily records showing times road watering was conducted, and notations of the reasons (i.e., operating or weather conditions) for periods when watering was not considered necessary.
[Rule 62-213.440(1)(b), F.A.C.]

Annual Reports and Fees

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

FW8. 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.]

FW9. 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.]

FW10. 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.]

FW11. 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. Emissions Unit No. 001 – Municipal Solid Waste Landfill

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

EU No.	Brief Description
001	This emissions unit covers the following municipal solid waste (MSW) landfill operations at this facility: - an active unlined Class III area ; - an closed unlined Class I/III area; - an closed unlined Class III area; - an active lined Class I single liner Phase I area; - an active lined Class I double liner Phase II area; and - an active double liner Phase III area. An active landfill gas (LFG) collection system collects LFG from all of the above areas except the active Phase III area. The currently existing LFG collection system is owned and operated by Wheelabrator Ridge Energy, Inc.(WRE), in accordance with an agreement between Polk County and WRE. A collection and control system for Phase III is required to be operational prior to November 27, 2012 *(see Construction Permit 1050298-005-AC)*. Polk County is currently soliciting proposals for Phase III beneficial use of LFG and for operation of the gas collection and control system for Phase III. The currently collected LFG is processed through a gas treatment system prior to combustion by WRE. The LFG is a supplemental fuel source for the WRE waste wood and tire resource recovery facility. A backup open unassisted candlestick flare located on the landfill property is available to combust the LFG when the Wheelabrator facility cannot accept the LFG. The LFG treatment system at the LFG compressor skid consists of the processes described below: Filtration: The LFG is filtered through a 10-micron in-line filter mesh demister located upstream of each blower mounted 24-inch diameter vertical scrubber. Dewatering: Moisture is removed from the LFG using a series of 24-inch diameter vertical scrubbers, a fin fan cooler, and a refrigerated dryer. Compression: The LFG is compressed in two 150 HP Roots blowers. The LFG treatment processes at this compressor skid meet the NSPS 40 CFR 60 Subpart WWW definition of treatment since it "routes the collected gas to a treatment system that processes the collected gas for subsequent sale or use". Therefore, the LFG treatment system, in combination with the open candlestick flare, meet the LFG control requirements of 40 CFR 60.752(b)(2)(iii)(A) and (C) that the LFG gas be routed to a flare that meets the requirements of 40 CFR 60.18 or a treatment system that processes the LFG for subsequent use. The collection system, LFG treatment skid and flare are the emission control devices for this emissions unit. No part of this emission unit is operated as a bioreactor as defined in 40 CFR 63, Subpart AAAA 63.1990.

See Section D. for Common Conditions, including Monitoring, Recordkeeping and Reporting Requirements, for EU Nos. 001 and 006

(Permitting Note: The requirements below come from 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills)

Operating Requirements

A.1. Landfill Gas (LFG) Collection System Operating Requirements - The permittee shall:

a. Operate the LFG collection system such that gas is collected from each area, cell, or group of cells that make up this emission unit in which solid waste has been in place for:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade;

b. Operate the LFG collection system with negative pressure at each wellhead except under the following conditions:

(1) a fire or increased well temperature; *(Note: The permittee 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 No. D.6.)*

(2) use of a geomembrane or synthetic cover; and

(3) a decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. *(Note: All design changes shall be approved by the Department)*;

c. Operate each interior wellhead in the LFG collection system with a landfill gas temperature less than 55 °C and with an oxygen level less than 5 percent. The permittee may establish a higher operating temperature 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] Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined according to 40 CFR 60.753(c)(2).[2] *(See Specific Condition No. A.5. for associated monitoring requirements.)* Any wells demonstrating elevated temperature will be monitored for CO in accordance with Appendix C, paragraph 5.8.

[1] *(Permitting Note: See Appendix B, paragraph No. 5.3, for procedures the permittee will take if the oxygen concentration is greater than 5%. See Appendix D for Polk County's request for higher operating temperatures in several LFG extraction wells. See Appendix F for the Department's authorization of higher operating temperatures in specific LFG extraction wells.)*

[2] *(Permitting Note: See Appendix B, paragraph 5.1, for the alternate method for determining oxygen concentration.)*

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 permittee 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 permittee may establish an alternative traversing pattern that ensures equivalent coverage. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. *(See Specific Condition No. D.4., for specific surface monitoring requirements.)*

(Permitting Note: See Appendix B, paragraph Nos. 5.2 and 5.6 for areas to be avoided for surface monitoring.)

e. Operate the LFG collection system such that all collected gases are vented to a LFG emission control system designed and operated in compliance with Specific Condition No. A.3.(e). In the event the LFG 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.

f. Operate the LFG control or treatment system at all times when the collected gas is routed to the system.

g. If monitoring demonstrates that the operational requirements in paragraphs b., c., or d. above are not met, corrective action shall be taken as specified in Specific Condition Nos. A.4.c. and d. or Specific Condition No. D.4.d. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements specified above.

[40 CFR 60.752(b)(2) and 40 CFR 60.753]

A.2. Handling of LFG During Periods Of Electrical Power Outages - During periods when electrical power is lost or shut off to the LFG handling equipment on Wheelabrator Ridge Energy Generating Facility property, thereby taking the LFG collection system fan and LFG treatment system out of service beyond the allowable downtime period specified in 40 CFR 60.753(e), the LFG shall be passively directed to the backup open unassisted candle flare for combustion prior to venting. In order to insure proper flare operation, a backup power supply shall be used to keep the flare, flare flow meter and flare recorder operational.
[40 CFR 60.753(e); Rules 62-4.070(3), and 62-213.420(3)(j), F.A.C.]

Emission Control Requirements

A.3. LFG Collection and Control System - The active collection and control system that captures the gas generated within the areas described in this emission unit shall:

a. be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

b. collect gas from each area, cell, or group of cells that make up this emission unit 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; and

e. route all the collected gas to a control system that:

   (1) Is an open flare designed and operated in accordance with §60.18;

   (2) Routes the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of an open flare *(see (1) above)*.

(Note: The LFG collection and control system is not required in the asbestos disposal area.)

[40 CFR 60.752(b)(2)(ii) and (iii)]

Compliance Provisions

A.4. Compliance Provisions - Except for the alternatives specified in the Gas Collection and Control System (GCCS) Design Plan dated October 26, 2006, or addendums, the specified methods in paragraphs a. through e. below shall be used to determine whether the gas collection system is in compliance with Specific Condition Nos. A.1. and A.3.

a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill, follow the procedures in 40 CFR 60.755(a)(1).

b. The gas collectors shall be capable of controlling and extracting gas from all portions of the landfill warranting control per 40 CFR 60.752(b)(2)(ii)(A).

c. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with Specific Condition Nos. A.1.b. and A.3.c., the permittee shall measure gauge pressure at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under Specific Condition No. A.1.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.

   (Permitting Note: See Appendix B, paragraph 5.7 for alternative actions to remediate an exceedance in lieu of expanding the gas collection and control system.)

d. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and oxygen as provided in Specific Condition No. A.1.c. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval.

   (Permitting Note: See Appendix B, paragraph 5.3 for alternative wellhead monitoring and operation and paragraph 5.7 for alternative actions to remediate an exceedance in lieu of expanding the gas collection and control system.)

e. If the permittee seeks to demonstrate compliance with Specific Condition No. A.3.d., through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 they shall provide information satisfactory to the Department demonstrating that off-site migration is being controlled.

[40 CFR 60.752(b)(2) and 40 CFR 60.755]

Compliance Monitoring

See Section D. for additional compliance monitoring requirements

A.5. Wellhead Monitoring -To determine compliance with Specific Condition Nos. A.1.b.-c. and A.3.a.-d., the permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in Specific Condition A.4.c.;

b. Monitor oxygen concentration in the landfill gas on a monthly basis as provided in Specific Condition A.4.d.; and

c. Monitor temperature of the landfill gas on a monthly basis as provided in Specific Condition A.4.d.

[40 CFR 60.756(a)]

A.6. Flare Operation Monitoring - To determine compliance with Specific Condition A.1.e. and A.3.e. using an open flare the permittee 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 permittee 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)]

A.7. LFG Treatment System - The permittee has opted to use a LFG treatment system as the control device for LFG going to Wheelabrator Ridge Energy, Inc., and not going to the flare. To determine compliance with Specific Condition A.3.e. using a device other than an open flare or an enclosed combustor, the permittee shall provide information satisfactory to the Department as provided in 40 CFR 60.752(b)(2)(i)(B), describing the operation of the control device (LFG treatment system), the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Department shall review the information and either approve it, or request that additional information be submitted. The Department may specify additional appropriate monitoring procedures.

(Permitting Note: See Appendix B, paragraph 2.7.2 for the description of the LFG treatment system operated by Wheelabrator Ridge.)

[Rule 62-4.070(3), F.A.C.; 40 CFR 60.752(b)(2) and 40 CFR 60.756(d)]

Subsection B. Emissions Unit No. 004 – Diesel Engine Powered Yard Waste Grinder

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

EU No.	Brief Description
004	A portable diesel engine powered yard waste grinder, owned by a different company, is brought on-site from time to time to grind yard waste that is brought to the landfill. The engine is a 1,000 horsepower (HP) (maximum) engine fired with diesel fuel, with a maximum sulfur content of 1.5% by weight, at a maximum firing rate of 41 gallons per hour. More than one yard waste grinder may be on site, but only one is authorized to operate at a time.

(Permitting Note: This engine is not subject to 40 CFR 63 Subpart ZZZZ -National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because it remains on site for less than 12 consecutive months.)

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity - The maximum fuel usage rate is as follows:

EU No.	Maximum Fuel Usage gallons/consecutive 12 month period	Fuel Type
004	255,840	New diesel fuel with a maximum sulfur content of 1.5% by weight

[Rule 62-210.200 ("Potential to Emit"), F.A.C.; Construction Permit No. 1050298-003-AC.]

B.2. Hours of Operation - This emissions units may operate continuously (8,760 hours/year), subject to complying with the maximum fuel usage requirements in Specific Condition No. B.1.
[Rule 62-210.200 ("Potential to Emit"), F.A.C.; Construction Permit No. 1050298-003-AC]

Recordkeeping and Reporting Requirements

B.3. Grinder Engine Fuel Records - In order to document compliance with the limitations of Specific Condition No. B.1., the permittee shall keep grinder engine fuel records as described below:

Each Fuel Delivery

a. Vendor provided analysis of the diesel fuel for use in the yard waste grinder engine. The analysis shall be determined by appropriate ASTM methods.

Monthly

b. Quantity of diesel fuel used for the month (gallons/month).

c. Total diesel fuel used for the most recent 12 consecutive month period (gallons per 12 consecutive month period).

Monthly records shall be completed within 15 calendar days of the end of each month.

[Rule 62-4.070(3), F.A.C.; Construction Permit 1050298-003-AC]

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

EU No.	Brief Description
006	Closed Unlined Landfill Cell Nos. 2, 3, & 4 with Passive Flares This emissions unit covers an area of the municipal solid waste landfill with three (3) older closed, unlined Class I cells (Unlined Class I Cell Nos. 2 - 4) located in the southern portion of the site.* Waste was last accepted in these cells in 1985. **(Note: Cell No. 1. of this area meets the criteria for exclusion from the collection and control system requirements (see 40 CFR 60.759(a)(3)(ii).)* Cell Nos. 2, 3 and 4 have a passive LFG collection and control system consisting of six individual passive vents (wells) with perforated collection pipes and attached flare assemblies for control of non-methane organic compound (NMOC) emissions. The vent and flare assemblies are laid out to provide uniform coverage of the surface of the area. There is one (1) vent and flare assembly in Cell No. 2, three (3) in Cell No. 3, and two (2) in Cell No 4. The flares are solar power spark ignited candlestick open flares (solar-spark ignited flares). Each solar-spark ignited flare is an integrated system that generates and stores the electric power needed for ignition of the LFG through its own photocell solar panel. The flares are equipped with automatic igniter systems which spark intermittently at the flare tip for a specified period of time, with the cycle repeated automatically. The flares are designed to achieve 98% destruction efficiency. The vent and flare assemblies include a control (isolation) valve to shutoff flow of LFG to the flare/atmosphere, sampling ports, and a means to access the vent via a flange. Because these passive vents are individual stand-alone collection wells, each with its own solar flare control device, there is no LFG conveyance header or lateral piping. While there is no gas moving equipment to actively extract the LFG, there is a small blower on each flare which is intended to improve flame stability, but does not exert a significant vacuum on the vent. Operation of the solar powered spark igniter systems is monitored by the use of volt-hour counters which will track the electric generation performance of the solar power system confirming the operating status of the solar-igniters on the flares. The passive collection vent isolation valves will be secured in the open or closed position by use of car-seals or lock-and-key configurations to assure that LFG is not being exhausted without passing through the solar-spark ignited flare.

(Note: As defined in 40 CFR 60.751, passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas to a collection well rather than using gas mover equipment.)

See Section D. for Common Conditions, including Monitoring, Recordkeeping and Reporting Requirements, for EU Nos. 001 and 006

(Permitting Note: The requirements below come from 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills)

Operating Requirements

C.1. Landfill Gas (LFG) Passive Collection System Operating Requirements - The permittee shall:

a. Operate the collection system such that gas is collected from each area, cell, or group of cells that make up this emission unit in which solid waste has been in place for:

   (1) 5 years or more if active; or

   (2) 2 years or more if closed or at final grade.

b. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with an oxygen level less than 5 percent. The permittee may establish a higher operating temperature 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. Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined according to 40 CFR 60.753(c)(2).

   (*Permitting Note: See Appendix C, paragraph 5.3.1 for alternates to passive vent monitoring and operation.)*

c. 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 permittee 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 permittee 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.

d. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with Specific Condition No. C.2.d. Operation of the solar powered spark igniters is monitored by the use of volt-hour counters which will track the electric generation performance of the solar power system confirming the operating status of the solar igniters on the flares. The volt-hour counters are inspected on business days (Monday-Friday). In the event the collection or control system is inoperable during inspections, 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 of identifying the inoperable status. This alternative method of determining proper operation and response to a malfunction is allowed per 40 CFR 60.752(b)(2).

e. Operate the control or treatment system at all times when the collected gas is routed to the system.

f. If monitoring demonstrates that the operational requirements in paragraphs c., above are not met, corrective action shall be taken as specified in Specific Condition No. D.4.d. 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 section.

(Permitting Note - Because the LFG collection and control system for this emissions unit consists of passive vents with flare assemblies, air intrusion is not likely to occur and the compliance provisions in 60.755(a)(3) and (5) do not apply. See Appendix C, paragraph 5.3.1 for passive vent monitoring and operation.)

[40 CFR 60.752(b)(2) and 40 CFR 60.753]

Emission Control Requirements

C.2. Emission Control Requirements - The passive collection and control system that captures the gas generated within the areas described in this emission unit shall:

a. be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

b. collect gas from each area, cell, or group of cells that make up this emission unit 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. be designed to minimize off-site migration of subsurface gas; and

d. route all the collected gas to a control system that is an open flare designed and operated in accordance with §60.18.

[40 CFR 60.752(b)(2)(ii) and (iii)]

Compliance Provisions

C.3. Compliance Provisions - Except for the alternatives specified in the Addendum to Gas Collection and Control System Design Plan dated May 2, 2008, or additional addendums, the specified methods in paragraphs a. through c. below shall be used to determine whether the gas collection system is in compliance with Specific Condition No. C.2.

a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill, follow the procedures in 40 CFR 60.755(a)(1).

b. The gas collectors shall be capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

c. If the permittee seeks to demonstrate compliance with Specific Condition No. C.2.c., through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 they shall provide information satisfactory to the Department demonstrating that off-site migration is being controlled.

(Permitting Note - Because the LFG collection and control system for this emissions unit consists of passive vents with flare assemblies, air intrusion is not likely to occur and the compliance provisions in 60.755(a)(3) and (5) do not apply. See Appendix C, paragraph 5.3.1 for passive vent monitoring and operation.)

[40 CFR 60.752(b)(2) and 40 CFR 60.755]

Compliance Monitoring

See Section D. for additional compliance monitoring requirements

C.4. Flare Operation Monitoring - To determine compliance with Specific Condition C.2.d. using an open flare the permittee 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 permittee 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.

**(Permitting Note: See Appendix C, paragraph 5.15.2 for alternate procedures to prevent the direct venting of uncombusted landfill gas into the atmosphere.)*

[40 CFR 60.752(b)(2) and 40 CFR 60.756(c)]

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

EU No.	Brief Description
001	Municipal Solid Waste Landfill with an Open Flare
006	Closed Unlined Landfill Cell Nos. 2, 3, & 4 with Passive Flares

Federal Regulatory Requirements

D.1. Federal NSPS (New Source Performance Standards) and NESHAPS (National Emission Standards for Hazardous Air Pollutants) Requirements - These emissions units shall comply with the applicable provisions of 40 CFR 60, Subpart A - General Provisions, 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 63 Subpart A - General Provisions and 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills) as adopted and incorporated by reference in Rules 62-204.800(8)(b) and (11)(b), F.A.C., and referenced below. The complete NSPS and NESHAPS standards are in the attached Appendix NSPS 40 CFR 60 Subpart A, Appendix NESHAP 40 CFR 63 Subpart A, Appendix 40 CFR 60 Subpart WWW, and Appendix NESHAP 40 CFR 63 Subpart AAAA, which are a part of this permit.

(Permitting Note: If at any time any portion of the facility meets the definition of a bioreactor contained in 40 CFR 60.751 and 40 CFR 63.1990, then the permittee shall notify the Department within 60 days of this determination and submit an application for a Title V air operation permit revision.)

NESHAP Subpart AAAA Note: Many of the requirements of NESHAP 40 CFR 63 Subpart AAAA reference directly back to the requirements of NSPS 40 CFR 60 Subpart WWW.

[Rules 62-204.800(8)(b) and 62-204.800(11)(b), F.A.C.; 40 CFR 60 Subparts A and WWW; 40 CFR 63 Subparts A & AAAA]

PSD Applicability

D.2. PSD Applicability - When calculating emissions for PSD purposes, the permittee shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 using AP–42 or other approved measurement procedures.
[40 CFR 60.754(c)]

Landfill Gas (LFG) Collection System Alternatives

D.3. LFG Collection System Alternatives - Each owner or operator seeking to install a LFG collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 40 CFR 60.756 shall provide information satisfactory to the Department as provided in 40 CFR 60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Department may specify additional appropriate monitoring procedures.

(Permitting Note: See Appendices B and C for LFG collection system alternatives.)

[40 CFR 60.752(b)(2) and 40 CFR 60.656(e)]

Compliance Monitoring of Operations

D.4. Surface Methane Monitoring Procedures - The following procedures shall be used for compliance with the surface methane operational standard as provided in Specific Condition Nos. A.1.d. and C.1.c.

a. After installation of the collection system, the permittee 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 (except as is provided for in Specific Condition No. D.5.) using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).

(Permitting Note: Surface methane emission monitoring of the Closed Class III, closed Unlined Class I/III and Active Class III landfill areas (EU No. 001) is conducted annually as of this permit issuance. See Appendix E. The conditions in this Specific Condition apply to the annual monitoring (see Specific Condition No. D.5.), and would also apply to quarterly monitoring if it is required to be reinstated.)

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 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.

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 subparagraphs (1) through (5) below 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 subparagraph (5) below shall be taken, and no further monitoring of that location is required until the action specified in subparagraph (5) below 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 subparagraph (2) or (3) above 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 paragraph (3) or (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.

(Permitting Note: See Appendix B, paragraph 5.5 and Appendix C, paragraph 5.14 for alternative surface emissions remedial actions.)

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

f. The permittee shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in 40 CFR 60.755(d).

[40 CFR 60.752(b)(2), 40 CFR 60.755 and 40 CFR 60.756 (f)]

D.5. Alternative Surface Methane Monitoring Frequency - Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

(Permitting Note: Surface methane emission monitoring of the Closed Class III, Closed Unlined Class I/III and Active Class III landfill areas (EU No. 001) is conducted annually as of this permit issuance.)

[40 CFR 60.752(b)(2) and 40 CFR 60.756(f)]

Reporting Requirements

D.6. Semi-Annual Reporting - The permittee shall submit semi-annual reports to the Compliance Authority of the recorded information in (a) through (g) below. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).

a. Value and length of time for exceedance of applicable parameters monitored according to Specific Condition Nos. A. 5., A.6., A.7 and C.4.

b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

d. All periods when the collection system was not operating in excess of 5 days.

e. The location of each exceedance of the 500 parts per million methane concentration as provided in Specific Condition No. A.1.d. and C.1.c., and the concentration recorded at each location for which an exceedance was recorded in the previous month.

f. The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR 60.755.

g. Startup, Shutdown, and Malfunction Plan report in accordance with 40 CFR 63.10(d)(5)(i).

[40 CFR 60.757(f); 40 CFR 63.1980(a); 40 CFR 63.10(d)(5)(i)]

D.7. Startup, Shutdown, and Malfunction Plan Event Reporting - The permittee shall report any action taken during a startup, shutdown or malfunction event that is not consistent with the SSM plan within 2 working days after commencing such actions, followed by a letter 7 days after the event. *(See Specific Condition No. D.14., for SSM plan requirements.)*
[40 CFR 63.10(d)(5)(ii)]

(Permitting Note: See 40 CFR 63.1990 and 63.1965 for deviation criteria.)

Recordkeeping Requirements

D.8. Design Capacity Report - The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
[40 CFR 60.758(a)]

D.9. Control Equipment Records -The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below 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). 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.

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 (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[40 CFR 60.758(b)(1) and (4)]

D.10. Equipment Operating Parameter Records - The permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Specific Condition Nos. A.5. – A.7. and C.4., as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. These records shall include:

a. Records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

b. Continuous records of the flame or flare pilot flame monitoring specified under Specific Condition No. D.9. and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[40 CFR 60.758(c)(2) and (4)]

D.11. Plot Map Records - The permittee shall keep up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. The records shall include:

a. Records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

b. Readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable 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).

[40 CFR 60.758(d)]

D.12. Startup, Shutdown, and Malfunction Records - When actions taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the facility's SSM plan, the permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. 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, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. *(See Specific Condition Nos. D.6.g. and D.7. for associated reporting requirements.)*
[40 CFR 63.6(e)(3)(iii)]

D.13. Exceedance Records - The permittee shall keep up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance for at least 5 years. *(See Specific Condition No. D.6. for associated reporting requirements.)*
[40 CFR 60.758(e)]

Other Requirements

D.14. Startup, Shutdown, and Malfunction (SSM) Plan - The permittee must maintain a SSM plan written according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR 63, Subpart AAAA. *(See Specific Condition Nos. D.6. and D.7. for associated reporting requirements, and D.12. for associated recordkeeping requirements.)*
[40 CFR 63.1960 and 40 CFR 63.6(e)(3)]

D.15. Applicability - The provisions of this subpart 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.

(Permitting Note: See Appendix C, paragraph 5.15.1 for alternatives to the exceedance standards.)

[40 CFR 60.752(b)(2) and 40 CFR 60.755]

Closure and Equipment Removal Requirements

D.16. Landfill Closure Reporting - The permittee shall submit a closure report to the Department within 30 days of waste acceptance cessation at the landfill. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).
[40 CFR 60.757(d)]

D.17. NMOC Emissions Calculations Prior to Removal - The permittee shall calculate the NMOC emission rate for purposes of determining when the gas collection and control system can be removed as provided in Specific Condition No. D.18, using the procedures in 40 CFR 60.754(b).
[40 CFR 60.754(b)]

D.18. LFG Collection and Control System Removal - The LFG collection and control system may be capped or removed provided that the conditions below are met:

a. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Department *(see Specific Condition No. D.16.)*.

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

c. Following the procedures specified in 40 CFR 60.754(b), the calculated 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.

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

D.19. Equipment Removal Reporting - The permittee shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.

a. The equipment removal report shall contain all of the following items:

   (1) A copy of the closure report submitted in accordance with Specific Condition No. D.16. of this section;

   (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 Department may request such additional information as may be necessary to verify that all of the conditions for removal in Specific Condition D.18. have been met.

[40 CFR 60.757(e)]

D.20. Title V Permit Requirements - When a MSW landfill subject 40 CFR 60, Subpart WWW is closed, the permittee is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of 40 CFR for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:

a. The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or

b. The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.

[40 CFR 60.752(d)]

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

EU No.	Brief Description
008	Existing Emergency Stationary Compression Ignition (CI) RICE Engine > 500 HP *(see list below)*

Manufacturer & Model	HP Rating	Year of Manuf.	Description
Detroit Diesel, 6063TK35	550	April 1999	Emergency Generator Admin Building

(Permitting Note – The above engine is exempt from the construction permit requirements of Rule 62-210.300(1), F.A.C., in accordance with the provisions of Rule 62-210.300(3)(a)35 *., F.A.C. (Stationary Reciprocating Internal Combustion Engines).)*

(Stationary CI RICE Engine Listing Note – The above stationary CI RICE engine information is based upon additional information received 03/28/12, submitted by Polk County in response to a Department request for additional information.)

IMPORTANT REGULATORY CLASSIFICATIONS - The engine in this emission unit is regulated under NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), as amended in the 03/09/11 Federal Register, as existing stationary Reciprocating Internal Combustion Engines (RICE) at an area source of hazardous air pollutants (HAPs).

Operation Requirements

E.1. Operating Hours - There are no specific limitations on operating hours for the existing stationary engine in this section listed above.

(Permitting Note - The maximum actual operating hours of this engine is inherently restricted by the limited purpose for which it is used.)

Applicable Federal Requirements

E.2. Federal 40 CFR 63 NESHAP Subpart ZZZZ Requirements - The existing stationary engine in this section listed above is subject to the applicable requirements of NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)), which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart ZZZZ, as it applies to existing RICE at area sources of hazardous air pollutants (HAPs). The applicable requirements for these are shown in the Summary of NESHAP 40 CFR 63 Subpart ZZZZ Applicable Requirements for Existing CI RICE at Area Sources of HAPs, attached to this permit, under the category Emergency CI > 500 HP.
[Rule 62-4.070(3), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

*(Compliance Note - The final compliance date for the applicable Subpart ZZZZ requirements for the existing compression ignition (**CI**) RICE engines at this area source of HAPs is 05/03/2013. (40 CFR 63.6595(a)(1).)*

E.3. Federal NESHAP 40 CFR 63 Subpart A General Provisions Requirements - The engine in this section listed above is subject to the applicable requirements of NESHAP 40 CFR 63 Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rules 62-204.800(11)(d), F.A.C., which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart A. The applicable requirements of Subpart A are shown in Table 8 to 40 CFR 63 Subpart ZZZZ.
[Rule 62-208.800(11)(d), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

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

EU No.	Brief Description
009	Two (2) Existing Emergency Stationary Compression Ignition (CI) RICE Engines ≤ 500 HP *(see list below)*

Manufacturer & Model	HP Rating	Year of Manuf.	Description
Cummins, 6CTA8.3-G2	277	1993	Emergency Generator Booster Pump Station
KIA, 2299540100	51	1/20/2002	Emergency Generator Scale House

(Permitting Note – All of the above engines are exempt from the construction permit requirements of Rule 62-210.300(1), F.A.C., in accordance with the provisions of Rule 62-210.300(3)(a)35.*, F.A.C. (Stationary Reciprocating Internal Combustion Engines).)*

(Stationary CI RICE Engine Listing Note – The above listing of stationary CI RICE engines at this facility is based upon additional information received 03/28/12, submitted by Polk County in response to a Department request for additional information.)

IMPORTANT REGULATORY CLASSIFICATIONS - The engines in this emission unit are regulated under NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), as amended in the 03/09/11 Federal Register, as existing stationary Reciprocating Internal Combustion Engines (RICE) at an area source of hazardous air pollutants (HAPs).

Operation Requirements

F.1. Operating Hours - There are no specific limitations on operating hours for the existing stationary engines listed above.

(Permitting Note - The maximum actual operating hours of these engines is inherently restricted by the limited purpose for which they are used.)

Applicable Federal Requirements

F.2. Federal 40 CFR 63 NESHAP Subpart ZZZZ Requirements - The existing stationary engines in this section listed above are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)), which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart ZZZZ, as it applies to existing RICE at area sources of hazardous air pollutants (HAPs). The applicable requirements for these are shown in the Summary of NESHAP 40 CFR 63 Subpart ZZZZ Applicable Requirements for Existing CI RICE at Area Sources of HAPs, attached to this permit, under the category Emergency CI ≤500 HP.
[Rule 62-4.070(3), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

*(Compliance Note - The final compliance date for the applicable Subpart ZZZZ requirements for the existing compression ignition (**CI**) RICE engines at this area source of HAPs is 05/03/2013. (40 CFR 63.6595(a)(1).)*

F.3. Federal NESHAP 40 CFR 63 Subpart A General Provisions Requirements - The engines in this section listed above are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rules 62-204.800(11)(b), F.A.C., which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart A. The applicable requirements of Subpart A are shown in Table 8 to 40 CFR 63 Subpart ZZZZ.
[Rule 62-208.800(11)(b), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

Subsection G. This section addresses the following emissions unit (EU).

EU No.	Brief Description
010	Two (2) Existing Non-Emergency Stationary CI Diesel Engines ≤ 300 HP *(listed below):*

Manufacturer & Model	HP Rating	Year of Manuf.	Description
Perkins, LD 70323	80	6/6/1997	Water Truck Loading Pump
Perkins, LD 70323	80	6/6/1997	Leachate Unloading Pump

(Permitting Note – The above engines are exempt from the construction permit requirements of Rule 62-210.300(1), F.A.C., in accordance with the provisions of Rule 62-210.300(3)(b)1., F.A.C. (Generic Emissions Unit or Activity Exemption).)

(Stationary CI RICE Engine Listing Note – The above listing of stationary CI RICE engines at this facility is based upon additional information received 03/28/12, submitted by Polk County in response to a Department request for additional information.)

IMPORTANT REGULATORY CLASSIFICATIONS - The engines in this emission unit are regulated under NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), as amended in the 03/09/11 Federal Register, as existing stationary Reciprocating Internal Combustion Engines (RICE) at an area source of hazardous air pollutants (HAPs).

Operation Requirements

G.1. Operating Hours - There are no specific limitations on operating hours for the existing stationary engine in this section listed above.

(Permitting Note - See also the previous Permitting Note below the descriptions of these emission units. The maximum actual operating hours of these engines is inherently restricted by the limited purpose for which they are used.)

Applicable Federal Requirements

G.2. Federal 40 CFR 63 NESHAP Subpart ZZZZ Requirements - The existing stationary engines in this section listed above are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)), which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart ZZZZ, as it applies to existing RICE at area sources of hazardous air pollutants (HAPs). The applicable requirements for these are shown in the Summary of NESHAP 40 CFR 63 Subpart ZZZZ Applicable Requirements for Existing CI RICE at Area Sources of HAPs, attached to this permit, under the category Non-Emergency CI < 300 HP.
[Rule 62-4.070(3), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

*(Compliance Note – The final compliance date for the applicable Subpart ZZZZ requirements for the existing compression ignition (**CI**) RICE engines at this area source of HAP is 05/03/2013. (40 CFR 63.6595(a)(1).)*

G.3. Federal NESHAP 40 CFR 63 Subpart A General Provisions Requirements - The engines in this section listed above are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rules 62-204.800(11)(d), F.A.C., which is attached to this permit as Appendix NESHAP 40 CFR 63 Subpart A. The applicable requirements of Subpart A are shown in Table 8 to 40 CFR 63 Subpart ZZZZ *(see Appendix NESHAP 40 CFR 63 Subpart ZZZZ)*.
[Rule 62-208.800(11)(d), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

Appendix B, Sections 2 and 5 of the Gas Collection and Control System (GCCS) Design Plan dated October 26, 2006.

Appendix C, Section 5 of the Addendum to Gas Collection and Control System Design Plan dated May 2, 2008.

Appendix D, Request for Higher Operating Temperature for Landfill Gas Extraction Wells dated May 2, 2008.

Appendix E, Reduction of Surface Emissions Monitoring Frequency on the Closed Class III, Closed Unlined Class I/III and Active Class III Landfill dated April 30, 2009.

Appendix F, FDEP Approval Letter dated July 30, 2008.

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

Appendix NESHAP 40 CFR 63, Subpart A - General Provisions.

Appendix NESHAP 40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

Appendix NESHAP 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.

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

Appendix NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

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

Summary of NESHAP 40 CFR 63 Subpart ZZZZ Applicable Requirements.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Statement of Basis.

Table H, Permit History.