Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

FINAL PERMIT

PERMITTEE

Polk County Board of County Commissioners
Polk County Waste Resource Management Division
10 Environmental Loop South
Winter Haven, FL 33880-1069

Authorized Representative:
Mr. Brooks Stayer, Waste Resource Mgmt. Director

Air Permit No. 1050298-006-AC
Permit Expires: 02/28/2013
Site Name : Polk County North Central Landfill
Minor Air Construction Permit
Project Name: Add new landfill gas flare and modify flow rate to existing flare

This is the final air construction permit, which establishes a flow rate cap of landfill gas (LFG) to the existing flare and authorizes the construction of a LFG candlestick flare at the Class I, Phase III area of the Polk County North Central Landfill (Standard Industrial Classification No. 4953). The facility is located in Polk County at 7425 Highway 540 in Winter Haven, Florida. The UTM coordinates are Zone 17, 416.8 km East, and 3100.1 km North. As noted in the Final Determination provided with this final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Facility-wide and Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida

_____ _____

Mara Grace Nasca Effective Date
District Air Program Administrator
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on _____ to the persons listed below.

Brooks Stayer, Waste Resource Management Director
Polk County Waste Resource Management Division
brooksstayer@polk-county.net

David Huff, P.E.
Polk County Waste Resource Management Division
davidhuff@polk-county.net

Lindsey E. Kennelly, P.E.
SCS Engineers
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Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

_____

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility is a municipal solid waste landfill. The existing facility consists of the following emissions units.

Facility ID No. 1050298	
ID No.	**Emission Unit Description**
001	Municipal Solid Waste Landfill with an Open Flare
003	Roads and Earthmoving Operations
004	Diesel Engine Powered Yard Waster Grinder No. 1
005	Diesel Engine Powered Yard Waste Grinder No. 2
006	Closed Unlined Landfill Cell Nos. 2, 3 & 4 with passive flares

Project Description and Affected/Proposed Emission Units

This project establishes a flow rate cap of landfill gas (LFG) in the existing Phase I & II flare and authorizes the construction of a candlestick flare to combust LFG coming from the new Phase III landfill gas collection system.

Facility ID No. 1050298	
ID No.	**Emission Unit Description**
001	Municipal Solid Waste Landfill with two Candlestick Open Flares (Phase I & II and Phase III)

NOTE: *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is subject to New Source Performance Standard (NSPS) 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), as adopted by reference in Rule 62-204.800(8)(b), F.A.C.; and to NESHAP 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills), as adopted by reference in Rule 62-204.800(11)(b), F.A.C.; as well as the Subpart A General Provisions for both 40 CFR 60 and 40 CFR 63. These documents are included as appendices to the current Title V air operation permit (1050298-005-AV).

SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS (FINAL)

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District's Air Resource Management Section. The Southwest District's mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Air Resource Management Section
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-632-7600

All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority - All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southwest District Office's Air Resource Management Section (see above mailing address and phone number).

3. Appendices - The following Appendices are attached as part of this permit:

a. Appendix A. Citation Formats and Glossary of Common Terms;
b. Appendix B. General Conditions;
c. Appendix C. Common Conditions; and
d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures - Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions - For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]

6. Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report - On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

8. Application for Title V Air Operation Permit Revision - This permit authorizes construction or modification of the permitted emissions unit(s) and initial operation to determine compliance with Department rules. A Title V air operation permit is required for continued operation of the permitted emissions unit(s). The permittee shall apply for a Title V air operation permit revision to incorporate the terms and conditions of this construction permit no later than 180 days after commencing operation of the Phase III flare. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Title V air operation permit revision, the applicant shall submit the following:

a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;

b. a detailed description of the installed Phase III LFG flare and associated equipment, including manufacturer, model number, and manufacturer's information for this model flare (including safety equipment); and

c. a copy of the most recent compliance test reports required by Specific Condition No. A.9., if not previously submitted.

The application shall be submitted to the Permitting Authority.

[Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. EU 001 Municipal Solid Waste Landfill w/ two Candlestick Open Flares (Phase I & II and Phase III)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
001	This emissions unit covers the municipal solid waste landfill operations at this facility, except for four (4) older closed, unlined Class I cells (unlined Class I cell Nos. 1 - 4) located in the southern portion of the site (see EU 006). This emission unit covers the following solid waste disposal areas: - a closed unlined Class I/III area; - a closed unlined Class III area; - an inactive unlined Class III area, which is in the closure process; - a temporarily closed single lined Class I Phase I area, which is in the closure process; - a double lined Class I Phase II area, which is in the closure process; and - an active double lined Class I Phase III area. An existing active landfill gas (LFG) collection system collects LFG from all of the above areas except the new Phase III area. The new Phase III area will have a separate a LFG collection system that collects LFG just from the Phase III area. The LFG from the Phase III area will travel through a pipe that runs on the north side of the landfill and will join with LFG from the Phase I & II area at the existing Condensate Sump CS-1. The LFG will then be treated at a LFG treatment system on Wheelabrator Ridge Energy, Inc., property (located adjacent to the north side of the landfill). It will then be sold to Wheelabrator Ridge Energy, Inc., for combustion by their waste wood and waste tire resource recovery facility as a supplemental fuel source. When the Wheelabrator facility cannot accept the LFG, either of two backup open unassisted candlestick flares designated as Phase I & II flare and Phase III flare will be available to combust LFG from either the Phase I & II area and the Phase III area. These two flares may also be available to combust LFG from the future Phase IV area after Department review. The Phase I & II flare will have a flow rate restricted to 1,800 scfm by a hard orifice plate within the flare. The new candlestick flare, designated as the Phase III flare will have a maximum flow rate by design of 2,200 scfm**.**

Permitting Note: Unless otherwise stated, all specific conditions in this permit apply to both the Phase I & II and Phase III flares.

PERFORMANCE RESTRICTIONS

A.1. Federal Rule Applicability - This emission unit is subject to the requirements of Federal New Source Performance Standard (NSPS) Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), and NESHAP 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills), and the 40 CFR 60 and 40 CFR 63 Subpart A General Provisions for the NSPS and NESHAP standards.
[Rules 62-204.800(8) and (11), F.A.C.; NSPS 40 CFR 60 Subpart WWW; NESHAP Subpart AAAA]

Permitting Note – Several key applicable requirements of NSPS Subpart WWW and NESHAP Subpart AAAA are included in the Specific Conditions below. They are indicated by the notation (NSPS Subpart WWW (or A)) or (NESHAP Subpart AAAA (or A)) after the condition subject caption. For the complete

requirements of these subparts see the appropriate appendices to the current Title V air operation permit, 1050298-005-AV).

A.2. Hours of Operation - The hours of operation are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200 ("Potential to Emit"), F.A.C.]

A.3. Flare Design and Operating Requirements (NSPS Subpart WWW) - The Phase I & II and Phase III flares shall be designed and operated in accordance with NSPS Subpart WWW and NSPS Subpart A 40 CFR 60.18(b) through (f) (General Control Device Requirements - Flares).

a. The Phase I & II flare shall have the hard orifice plate to restrict the maximum LFG flow rate to 1,800 scfm installed prior to operation of the Phase III flare.

b. The hard orifice plate in the Phase I & II flare shall not be removed without prior Department approval.

c. In accordance with NSPS Subpart WWW 40 CFR 60.752(b)(2)(ii), the Phase III LFG flare shall be installed and operating, controlling LFG from the NSPS LFG collection system in the Phase III area prior to November 27, 2012 (i.e., 5 years from the date of initial acceptance of municipal solid waste into Phase III).

[Rules 62-4.070(3) and 62-201.800(8)(b) and (d), F.A.C.; NSPS Subpart WWW 40 CFR 60.752(b)(2)(ii) & (iii)(A) and Subpart A 40 CFR 60.18]

Permitting Note - Key applicable requirements of 40 CFR 60.18 are included in the Specific Conditions below. They are indicated by the notation (40 CFR 60.18) after the condition subject caption. The complete text of NSPS Subpart A 40 CFR 60.18 can be found in the current Title V air operation permit 1050298-005-AV).

A.4. Phase III LFG Candlestick Utility Flare Operation NSPS Requirements (40 CFR 60.18) -

a. The flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f)(2). [40 CFR 60.18(c)(2)]

b. The owner/operator has the choice of adhering to either the heat content specifications in 40 CFR 60.18 (c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18 (c)(4); or adhering to the requirements in 40 CFR 60.18 (c)(3)(i). [40 CFR 60.18(c)(3)]

c. The flare shall be operated at all times when emissions may be vented to them. [40 CFR 60.18(e)]

[Rules 62-204.800(8)(b) and (d), F.A.C.; NSPS Subpart WWW, 60.752(b)(2)(iii)(A), and Subpart A 40 CFR 60.18]

EMISSIONS LIMITATIONS

A.5. Visible Emissions (VE) Limitation (40 CFR 60.18) - The candlestick flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f)(1) *(see Specific Condition No. A.8.)*, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
[Rules 62-204.800(8)(b) and (d), F.A.C.; NSPS Subpart WWW 60.752(b)(2)(iii)(A) and Subpart A 40 CFR 60.18(c)(1)]

TESTING REQUIREMENTS – Phase III Flare

A.6. Visible Emissions Initial Performance Testing (NSPS Subpart A) - The owner or operator shall conduct an initial visible emissions (VE) performance test on the Phase III flare within 60 days of initial operation of the flare controlling LFG emissions from the completed NSPS LFG collection system in the Phase III area. *(Note: See Specific Condition No. A.16. for start of operation notification requirement.)*
[Rule 62-204.800(8)(d), F.A.C.; NSPS Subpart A 40 CFR 60.8(a)]

A.7. Performance Test Notification (NSPS Subpart A) - At least 30 days prior to the date on which the initial performance test is due to begin, the permittee shall provide written notification of the test to the Compliance Authority. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.
[Rules 62-204.800(8)(d), and 62-297.310(7)(a)9, F.A.C.; NSPS Subpart A 40 CFR 60.8(d)]

Permitting Note: The notification should also include the relevant emission unit ID No(s)., test method(s) to be used, and pollutants to be tested.

A.8. Test Method for Initial Visible Emissions Performance Test (40 CFR 60.18) - Compliance with visible emissions (VE) limitation of Specific Condition No. A.5. shall be determined using EPA Method 22, contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. The observation period for the initial performance test shall be 2 hours. Test procedures shall meet all applicable requirements of NSPS Subpart A 40 CFR 60.8 and 60.18(f), and Chapter 62-297, F.A.C.
[Rules 62-204.800(8)(d), 62-297.310(4)(a)2., and 62.297.401(9), F.A.C.; NSPS Subpart WWW 40 CFR 60.752(b)(2)(iii)(A), and Subpart A 40 CFR 60.8 and 60.18(f)]

A.9. Performance Test Report - The permittee shall file a report with the Compliance Authority on the results of the visible emissions performance testing. The required test report shall be filed with the Department as soon as practical, but no later than 45 days after each test is completed. The test report submittal shall meet all applicable requirements of NSPS Subpart WWW 40 CFR 60.758 and Subpart A 40 CFR 60.8, and Chapter 62-297, F.A.C., and shall include the Performance Testing Records described in Condition No. A.10. below.
[Rules 62-204.800(8)(b) & (d), and 62-297.310, F.A.C.; NSPS Subpart WWW 40 CFR 60.758(b) and Subpart A 40 CFR 60.8(a)]

A.10. Performance Testing Records (NSPS Subpart WWW) - Each owner or operator shall keep records of all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations as measured during the initial performance test. The performance test period records shall also include 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. These records shall be kept for the life of the control equipment (flare). In addition, records of the control device vendor specifications shall be maintained until removal of the control device (flare).
[Rule 62-204.800(8)(b), F.A.C.; NSPS Subpart WWW 40 CFR 60.758(b)]

MONITORING REQUIREMENTS

A.11. Flare Operation Monitoring (NSPS Subpart WWW)(40 CFR 60.18) **-** Each owner or operator using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
[40 CFR 60.18(d) & (f)(2), and 60.756(c)(1)]

b. A device that records flow to or bypass of the flare. The owner or operator shall either:

(i) 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

(ii) 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 60.18(f)(2), and 60.756(c)(2)]

[Rules 62-204.800(8)(b) and (d), F.A.C.; NSPS Subpart WWW 40 CFR 60.752(b)(2)(iii)(A), and 60.756(c); and NSPS Subpart A 40 CFR 60.18(d) and (f)(2)]

RECORDS AND REPORTS

A.12. Operation Records (NSPS Subpart WWW) - Each owner or operator shall keep continuous records of the following flare operating parameters.

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. [40 CFR 60.758(c)(2)]

b. Records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [40 CFR 60.758(c)(4)]

[Rule 62-204.800(8)(b), F.A.C.; NSPS Subpart WWW 40 CFR 60.758(c)]

A.13. Record Maintenance Requirements - Unless otherwise specified in this permit, records required by this permit shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained at the facility for at least a five (5) year period.
[Rules 62-104.800(8)(b) and 62-213.440(1)(b)2.b., F.A.C.; NSPS Subpart WWW 40 CFR 60.758(c)]

A.14. Startup, Shutdown, Malfunction (SSM) Plan (NESHAP Subparts AAAA and A) - Within 60 days of the Phase III Flair being put into service, the facility Startup, Shutdown, and Malfunction (SSM) Plan, as required by NESHAP Subpart A 40 CFR 63.6(e)(3), shall be updated to include provisions that relate to the Phase III LFG flare.
[Rules 62-204.800(11)(b) and (d), F.A.C.; NESHAP Subpart A 40 CFR 63.6(e), and Subpart AAAA 63.1955(c), 63.1960, and 63.1980(b)]

A.15. Semi-Annual NSPS/NESHAPS Compliance Reports (NSPS Subpart WWW and NESHAP Subpart AAAA) - The owner or operator shall submit to the Compliance Authority semiannual (every 6 months) reports of the recorded information required in 40 CFR 60.757(f), which includes the following:

a. Phase I & II and Phase III -

   1. 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 § 60.756.

   2. 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.

b. Phase III - An initial semiannual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For open flares, reportable exceedances are defined under 40 CFR 60.758(c) (i.e., all periods of operation in which the flame or flare pilot flame is absent, as well as any periods when flame or flare pilot flame monitoring was not in service or not operating properly.)

[Rules 62-204.800(8)(b) and (11)(b), F.A.C.; NSPS Subpart WWW 40 CFR 60.757(f) and 60.758(c); NESHAP 40 CFR 63.1955(c) and 63.1980(a)]

A.16. NSPS Notification Requirements (NSPS Subpart A) - In accordance with the requirements of 40 CFR 60.7(a), the permittee shall submit written notification of the following to the Compliance Authority:

a. the date construction of the LFG collection and control system (Phase III LFG flare) is commenced (notification shall be postmarked no later than 30 days after such date);

b. the actual date of initial operation of the completed LFG collection and control system (notification shall be postmarked within 15 days after such date);

c. the date and time on which the initial NSPS performance test for the Phase III LFG flare *(see Specific Condition No. A.6.)* is to begin, postmarked not less than 30 days prior to the date of such test. *(See Specific Condition No. A.7. for complete performance test notification requirement.)*

[Rule 62-204.800(8)(d), F.A.C.; NSPS Subpart A 40 CFR 60.7(a) and 60.8(d)]

A.17. Phase I & II Flare Flow Rate Restrictor Notification - The permittee shall submit written notification of the date the hard orifice plate was installed restricting the flow rate of LFG to the Phase I & II flare to 1,800 scfm to the Compliance Authority within 15 days after such date.
[Rule 62.4-070(3), F.A.C.]