Florida Department of Environmental Protection

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PERMITTEE

New River Solid Waste Association
Post Office Box 647
Raiford, Florida 32083

Air Permit No. 1250008-006-AC
Permit Expires: October 14, 2013
Issue Date: October 14, 2011

Authorized Representative:
Mr. Darrell O'Neal, Executive Director

3,000 scfm Open Flare Installation Project

This air construction permit authorizes the New River Solid Waste Association to 1) construct a 3,000 scfm maximum design capacity open flare and blower station as the replacement of the existing 2,400 scfm maximum design capacity open flare and blower station; and 2) reduce operation of the existing 2,400 scfm open flare to only as a backup unit should the 3,000 scfm flare becomes non-operational. The proposed work will be conducted at the New River Regional Landfill in Raiford, FL. The facility is designated Standard Industrial Classification No. 4953. This existing facility is located at 24276 N.E. 157th Street, Raiford, Union County, FL 32083; UTM Coordinates: Zone 17, 382.8 km East; 3330.3 km North; Latitude: 30° 06′ 00′′North and Longitude: 82° 13′ 00′′ West.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. 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 construction 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 Jacksonville, Florida

Christopher L. Kirts, P.E.
District Air Program Administrator

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.

Monique Jordan

10/14/2011

(Clerk) (Date)

SUBSECTION A. FACILITY DESCRIPTION

New River Regional Landfill, a municipal solid waste (MSW) landfill with a total site area of 500 acres, of which approximately 66.4 acres will be used for disposal of Class I solid waste and 16 acres will be used for disposal of Class III solid waste. The Class I Landfill currently consists of Cells 1 through 5.

The initial solid waste construction permit for the Class I landfill was issued on June 1, 1990. The landfill was modified in 2001. The Class III Landfill began waste acceptance in 1992 and is currently permitted to accept waste. The Class III landfill is also an active asbestos waste disposal site. A waste tire collection center is also included at this landfill.

The addition of liquids to bioreactor began on May 30, 2003. On September 9, 2008, the landfill was issued minor permit modification No. 0013500-017 to Solid Waste Permit No.0013500-012-SC for bioreactor decommissioning. At present, the facility does not have a bioreactor.

The landfill includes an active gas collection system consisting of both horizontal collection trenches and vertical gas collection wells. This collection system is connected to a landfill gas control system that currently consists of three 800 scfm blowers and an open flare with a capacity of 2400 standard cubic feet per minute (scfm).

The existing facility consists of the following emissions units.

E.U. ID. No.	Brief Description
001	Class I landfill /gas collection system/ 2,400 scfm non-assisted, utility flare[1]
002	Fugitive NMOC emissions and hazardous air pollutants (HAP) emission from the natural decomposition reactions associated with the landfill which are not collected by the landfill gas collection system

[1] On July 6, 2011, NRSWA requested removal of the Class III landfill from the gas collection and control system at the New River Regional Landfill pursuant to 40 CFR 60.759(3)(ii) - any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The Department approved this request on July 22, 2011.

PROJECT DESCRIPTION

The landfill was issued Solid Waste Permit No. 13500-023-SC to construct and operate a new solid waste disposal area (Cell 6) adjacent to existing Cells 1-5. The landfill is requesting a modification to Existing Emissions Units 001 and 002 to include the new solid waste disposal area. Cell 6 will increase the Class I disposal capacity by approximately 1.3 million megagrams. The existing permitted disposal capacity of Cells 1-5 is approximately 3.7 megagrams.

In addition to constructing the landfill expansion, the New River Solid Waste Association proposes to replace the existing 2,400 scfm open flare and blower station with a new 3,000 scfm open flare and blower station. The existing flare and blower station was constructed in 2001 and serves as the primary control device for the landfill gas collected from Cells 1-5. The flare and blower station is being replaced to increase the control device destruction capacity for the Cell 6 expansion and the next potential cell expansion, and modernize the control device for increased reliability, and future integration with a proposed landfill gas-to-energy facility.

The landfill proposes to operate the existing 2,400 scfm open flare as a backup should the 3,000 scfm flare becomes non-operational.

This project also includes the identification of site internal combustion engines that fall under the conditional exemption for internal combustion engines in Rule 62-210.300(3)(a)35., F.A.C.

The existing facility is classified as an existing PSD minor source facility as pollutant emissions are below the PSD Major Source threshold for New Source Review. This project would be subject to PSD preconstruction review if the potential emissions from the proposed project equaled or exceed the PSD Major Source thresholds itself.

Pursuant to Rule 62-212.400, F.A.C., New River Solid Waste Association provided information to show that the project will not result in potential emissions such that preconstruction review for the Prevention of Significant Deterioration (PSD) of Air Quality is required.

The proposed project will affect the following emissions units.

E.U. ID No.	Brief Description
001	Class I landfill /gas collection system/ 2,400 scfm non-assisted, utility flare[1]
002	Fugitive NMOC emissions and hazardous air pollutants (HAP) emission from the natural decomposition reactions associated with the landfill which are not collected by the landfill gas collection system

This project will add the following emissions units.

E.U. ID No.	Brief Description
004	3,000 scfm open, non-assisted Flare and Blower Station.

The following emission units and activities were determined to meet the generic exemption criteria of Rule 62-210.300(3)(b)1., F.A.C., and therefore are exempt from any requirement to obtain an air construction permit.

Tank Description	Volume in Gallons
Unleaded Gasoline Fuel tank located inside Maintenance Building	500
Diesel Storage Administrative Office Area Generator Storage	110
Diesel Storage for GCCS Flare Generator	500
Diesel Storage for Generator Maintenance and Equipment Building Area Generator	100
Off-Road Diesel Fuel Tank located inside Maintenance Building	4,000
On-Road Diesel Fuel Tank located inside Maintenance Building	1,000
Refueling Truck Oil Tanks: Used Oil Vacuum System Hydraulic Fluid Motor Oil Motor Oil Transmission Fluid Grease Barrel	 30 40 40 40 40 30
Refueling Truck Diesel Fuel Tank	500

The following internal combustions engines were determined to meet the conditional exemption in Rule 62-210.300(3)(a)35., F.A.C. and therefore are exempt from any requirement to obtain an air construction permit.

Emergency Generators:					
Engine Make	**Description**	**Date Acquired On site**	**Fuel Type**	**HP**	**Ignition Type**
Cummins	71 Fermont Diesel Generator	2/17/2006	Diesel	Unknown	CI
Mitsubishi/Generac	60 KW Diesel Generator (office)	9/25/2006	Diesel	60	CI
Olympian	Diesel Generator - Flare	Unknown	Diesel	85	CI

Miscellaneous ICE:					
Engine Make	**Description**	**Date Acquired On site**	**Fuel Type**	**HP**	**Ignition Type**
Honda	Gas Generator - 5346540	8/2/1999	Gasoline	11	SI
Perkins/Wacker	Generator, Portable	5/10/2000	Gasoline	71	SI
Perkins/Wacker	02 Godwin Pump w/Trailer	1/14/2004	Diesel	84	CI
Onan	Generator Floodlight Set	2/17/2005	Diesel	20	CI
John Deere	6" Godwin Dir- Prime PumpSet	9/19/2005	Diesel	80	CI
CAT	Peterson Grinder w/CAT Eng	12/1/2005	Diesel	450	CI
Morbark	Chipper Mulcher	11/8/2006	Diesel	325	CI
Honda/Husqvarna	13 HP-6500W Generator	7/13/2007	Gasoline	13	SI

FACILITY REGULATORY CLASSIFICATION

- The facility is not identified as a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- 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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Air Resources Section, Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office. The Permitting Authority's telephone number is 904/256-1700.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office. The mailing address and phone number of the District Office is: 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The Compliance Authority's telephone number is 904/256-1700.
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
   d. Appendix D. Common Testing Requirements
   e. Appendix E. NSPS 40 CFR 60 Subpart A -General Provisions
   f. Appendix F. NESHAP 40 CFR 63 Subpart A – General Provisions
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: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1) (a), F.A.C.]
7. Source Obligation:
   a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or

modification as though construction had not yet commenced on the source or modification.

b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V Air Operation Permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation of the replacement equipment. To apply for a Title V Air Operation Permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting and Compliance Authority.

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

This section of the permit addresses the following emissions unit(s).

E.U. ID No.	Brief Description
001	Class I landfill /gas collection system/ 2,400 scfm non-assisted, utility flare
002	Fugitive NMOC emissions and hazardous air pollutants (HAP) emission from the natural decomposition reactions associated with the landfill which are not collected by the landfill gas collection system
004	3,000 scfm open, non-assisted Flare and Blower Station. Two multistage centrifugal exhaust landfill gas blowers with a maximum design of 1,500 scfm, a minimum of -60 "w.c. inlet suction and 15" w.c. discharge pressure. The design includes the installation of a possible third blower of same sizing. Flare Stack Height.....…… 42 feet ± Exit Diameter……..... 12 inches Outlet Gas Temperature…….……...1200-1400°F± Maximum LFG Flow Rate……..... 3,000 scfm Minimum LFG Flow Rate…… 445 scfm Starter Fuel Type……..... LPG Destruction efficiency…… 98% total hydrocarbons@ CH_4 content of 30-50%

PROPOSED WORK

1. The permittee is authorized to conduct this project on the above cited Emissions Units as follows:

   - Modification of Emissions Units 001 and 002 to include the new solid waste disposal area, Cell 6;
   - Replace the existing 2,400 scfm open flare with a new open flare designed to handle maximum and minimum gas flow rates of 3,000 scfm and 300 scfm respectively;
   - Replace the existing three, 800 scfm 15 hp gas extraction centrifugal blowers with two new 1,500 scfm 40 HP multistage centrifugal LFG blowers, -60 w.c. inlet;
   - Installation of one 48 in. condensate knock out pot with 20 micron demister/filter as replacement of the existing condensate knock out pot associated with the 2,400 scfm flare;
   - Installation of flare and blower station associated instrumentation and equipment.

   [Application No. 1250008-006-AC]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity- 3,000 scfm Flare: The maximum landfill gas flowrate shall not exceed 3,000 standard cubic feet per minute of landfill gas, averaged hourly.

   [Rule 62-210.200(203 PTE), FAC, Rule 62-4.070, F.A.C.; Application No. 1250008-006-AC]

3. Hours of Operation -3,000 scfm Flare: The hours of operation are not restricted, i.e., 8760 hours per year.

   [Rule 62-210.200(203 PTE), FAC.; Application No. 1250008-006-AC]

METHOD OF FLARE OPERATION

4. Method of Operation- Flares:

   a. 2,400 scfm Flare: Upon completion of the installation and initial operation of the new 3,000 scfm flare, the Permittee shall restrict operation of the existing 2,400 scfm flare to only during times when the 3,000 scfm is non-operational. The 2,400 scfm shall be restricted to back up operation only.

   b. 3,000 scfm Flare: All LFG collected by the gas collection system shall be directed to the 3,000 scfm open flare for control unless it is non-operational. LFG shall then be directed to the 2,400 scfm open flare for control as described in Specific Condition 4.a. above. Collected LFG shall not be vented to the atmosphere.

   [Rules 62-4.160(2), 62-4.070(3), 62-210.200(PTE), F.A.C.; 40 CFR 60.752(b)(2)(iii)(A); 40 CFR 60.752(b)(2)(iii)(C); 40 CFR 60.753(e); Application No. 1250008-006-AC]

5. Method of Operation – 3,000 scfm Flare - Pilot Fuel. The flare shall fire LPG as its pilot fuel. LPG shall be used only for the purpose of igniting the flare and not be utilized as a supplemental fuel.

   [Rules 62-4.160(2), 62-4.070(3), 62-210.200(PTE), F.A.C.]

6. Method of Operation. The control system shall be operated at all times when the collected gas is routed to the system.

   [40 CFR 60.18(e); 40 CFR 60.753(f)]

7. Method of Operation –3,000 scfm Flare Flame. The flare shall be operated with a flame present at all times, as determined by the methods specified in Conditions 16., 17., 18., 19., and 20.

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(2)]

8. Method of Operation – LFG Heat Content & Exit Velocity. The permittee shall comply with the heat content specifications stated in paragraph (a) and the maximum tip velocity specifications in paragraph (b):

(a) The flare shall be used only with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in Condition 18.

(b) The flare shall be designed for and operated as follows:

(i) An exit velocity, as determined by the methods specified in Condition 19., less than 18.3 m/sec (60 ft/sec), except as provided in (ii) and (iii).

(ii) N/A - the net heating value of the gas being combusted is less than 37.3 MJ/scm (1,000 Btu/scf).

(iii) An exit velocity, as determined by the methods specified in Condition 19. less than the velocity, Vmax, as determined by the method specified in Condition 20., and less than 122 m/sec (400 ft/sec) is allowed.

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(3)(ii); 40 CFR 60.18(c)(4)]

9. Landfill Gas Collection System-Design: The LFG collection system at this facility is an active collection system. The system shall be designed as follows:

(1) 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;

(2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:

(i) 5 years or more if active; or
(ii) 2 years or more if closed or at final grade;

(3) Collects gas at a sufficient extraction rate;

Specific Condition 9. Continued:

(4) Designed to minimize off-site migration of subsurface gas.

[40 CFR 60.752(b)(2)(ii)(A)]

10. Landfill Gas Collection or Control System- Inoperable: In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

[40 CFR 60.753(e)]

EMISSION LIMITS AND STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

11. 3,000 scfm Flare -Visible Emissions. The flare shall be designed for and operated with no visible emissions as determined by the methods specified in Conditions 16., 17., 18., 19., and 20., except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(1)].

12. The 3,000 scfm flare is subject to the applicable General Provisions of 40 CFR 60 Subpart A (see Appendix E of this permit).

13. As a control device at a Municipal Solid Waste Landfill, the 3,000 scfm flare is subject to the applicable requirements in 40 CFR Part 63, Subpart A, as Specified in Table 1 - Applicability of NESHAP General Provisions to Subpart AAAA (see Appendix F of this permit).

[40 CFR 63.1955(b)]

14. As a control device at a Municipal Solid Waste Landfill, the 3,000 scfm flare is subject to requirements of 40 CFR 63.1960 through 63.1985 of 40 CFR 63 Subpart AAAA as applicable, including its incorporation into the written SSM plan as required by the provisions of 40 CFR 63.1960 and 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.

[40 CFR 63.1955(b)]

COMPLIANCE PROVISIONS

15. The provisions 40 CFR 63 Subpart WWW 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 (i.e. the flare).

    [40 CFR 60.755(e); 40 CFR 60.11(c)]

MONITORING OF OPERATIONS

16. Landfill Gas Control System – 3,000 scfm Flare: The flare shall be monitored to ensure that it is operated and maintained in conformance with its design. The following equipment shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications:

    (1) 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.

    (2) 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(d); 40 CFR 60.756(c); 40 CFR 60.18(f)(2)]

TEST METHODS AND FREQUENCY OF TESTING

17. Visible Emissions –3,000 scfm Flare. The test method for visible emissions shall be in accordance with EPA Method 22 of 40 CFR 60 Appendix A, adopted and incorporated by reference in Rule 62-204.800, F.A.C. The required observation period shall be 2 hours and shall be used according to Method 22.

    Pursuant to Method 22, the observer, at a minimum must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training is to be obtained from written materials found in References 1 and 2 or from the lecture portion of the Method 9 certification course.

Specific Condition No. 17. Continued:

Except in the case of a force majeure, as specified in 40 CFR 60.8(a)(1)-(4), the initial compliance tests shall be conducted 60 days after achieving the maximum production rate at which the flare will be operated, but not later than 180 days after initial startup of the flare.

Subsequent compliance tests shall be conducted on an annual basis, once each federal fiscal year (October 1 – September 30), thereafter.

[Rules 62-297.310(7)(a)4.a., 62-297.401(22),F.A.C.; 40 CFR 60.8(a); 40 CFR 60.11(e)(1); 40 CFR 60.18(f)(1)]

18. Net Heating Value – Flare. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

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

where:

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

K = Constant, 1.740 x 10-7 (1/ppm) (g mole/scm) (MJ/kcal)

where the standard temperature for (g mole/scm) is 20°C;

C_i= the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable; and

H_i=Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

The net heating value shall be determined initially pursuant to Specific Conditions 8. and 18. Subsequent determinations shall be conducted no less than on a 5 year basis, prior to operation permit renewal.

[40 CFR 60.18(f)(3); 40 CFR 60.754(e); Rule 62-4.070 & Rule 62-297.310(7)(a)3., F.A.C.]

19. Exit Velocity- 3,000 scfm Flare. The actual exit velocity of the flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under this condition.

    The exit velocity shall be determined initially pursuant to Specific Conditions 8. and 19. Subsequent determinations shall be conducted no less than on a 5 year basis, prior to operation permit renewal.

    [40 CFR 60.18(f)(4) ; 40 CFR 60.754(e); Rule 62-4.070 & Rule 62-297.310(7)(a)3., F.A.C.]

20. Maximum Permitted Velocity – Flare. The maximum permitted velocity, Vmax, for flares complying with Specific Condition 8.(b)(iii) shall be determined by the following equation.

    $$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

    V_{max}=Maximum permitted velocity, M/sec
    28.8=Constant
    31.7=Constant
    H_T=The net heating value as determined in Specific Condition 18.

    The maximum permitted velocity shall be determined initially pursuant to Specific Conditions 8. and 20. Subsequent determinations shall be conducted no less than on a 5 year basis, prior to operation permit renewal.

    [40 CFR 60.18(f)(5); Rule 62-4.070 & Rule 62-297.310(7)(a)3., F.A.C]

EXCESS EMISSIONS

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision}

21. Minimization of Emissions. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

    Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

NOTIFICATIONS, RECORDKEEPING AND REPORTING REQUIREMENTS

22. a. 3,000 scfm Flare -Commencement of Construction. The permittee shall submit a notification of the date construction of the flare is commenced postmarked no later than 30 days after such date.

    b. 3,000 scfm Flare -Notification of Initial Startup. The permittee shall submit a notification of the actual date of initial startup of the flare postmarked within 15 days after such date.

    [40 CFR 60.7(a)(1), and (3)]

23. Initial Compliance Test Notification. At least 30 days prior to the date on which each formal compliance test is due to begin; the permittee shall provide written notification of the test to the Air Compliance Section of this Office.

    If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the permittee shall notify this office as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with this office by mutual agreement.

    The notification must include at least 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.

    [40 CFR 60.7(a)(6); 40 CFR 60.8(d); Rule 62-204.800, FAC, Rule 62-297.310(7)(a)9., F.A.C.]

24. Subsequent Compliance Test Notification. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(7)(a)9., F.A.C.]

25. Compliance Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(8), F.A.C.]

26. Recordkeeping Information. The Permittee shall keep up-to-date, readily accessible records of the following information. This information shall be retained at least five years from the date of the sample, measurement, or record:

    a. The date and time when landfill gas is directed to the 2, 400 scfm open flare. This record shall also include the date and time when landfill gas is directed back to the 3,000 scfm open flare;

    b. The hours of operation, including any start-up, shutdown or malfunction in the operation of the open flare;

    [Rule 62-4.070, F.A.C.; Rule 62-213.440(1)(b)2.b., F.A.C.; Rule 62-213.410, F.A.C.]

27. 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.

    (1) The flare type (i.e., i.e., steam-assisted, air-assisted, or nonassisted);

    (2) All visible emission readings;

    (3) Heat content determination;

    (4) Flow rate or bypass flow rate measurements;

    (5) Exit velocity determinations made during the performance test as specified in 40 CFR 60.18;

    (6) 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)(4)]

28. Equipment Continuous Operating Parameter Records. The Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Specific Condition 16., 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.

    (1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under Condition 16.;

Condition 28. Continued:

(2) The Permittee, for use of the open flare, shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under Specific Condition 16., 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)]

29. Collection & Control System Operational Standard Exceedance Records. Except as provided in 40 CFR 60.752(b)(2)(i)(B), the owner or operator shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in Specific Conditions 4., 6., and 10., the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

Permitting Note: *40 CFR 60.752(b)(2)(i)(B) states the collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the owner or operator. 40 CFR 60.752(b)(2)(i)(D) states that the Administrator shall review the information submitted under paragraphs (A), (B), and (C) of this section and either approve it, disapprove it, or request that additional information be submitted.*

[40 CFR 60.758(e)]

30. Control System Monitoring Report. The owner or operator shall include the following information for 3,000 scfm flare in the semi-annual report required by 40 CFR 60.757(f) to the Compliance Authority of this Office. The first report of this information shall be submitted in the first semi-annual report following 180 days of installation and start-up of the 3,000 scfm flare.

(1) Value and length of time for exceedance of applicable parameters monitored under Specific Condition 16.

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under Specific Condition 16.

(3) 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.

[40 CFR 60.757(f)(1)(2),(3); 40 CFR 63.1980(a)]

UNCONFINED PARTICULATE MATTER EMISSIONS

31. 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 material; construction, alteration, demolition or wrecking; or industrially activity such as loading, unloading, storing and handling; without taking reasonable precaution to prevent such emissions. Reasonable precautions may include but are not limited to the following, as necessary:

- The entrance road is paved from the connection at SR 121 to a point approximately 5,000 feet beyond the scalehouse, which should prevent dust and particulate matter emissions at the landfill entrance;

- Dust and particulate matter emissions will be controlled in landfilling areas by covering landfill intermediate or final cover slopes with vegetation and/or permitted cover material as soon as practical. Areas not active may be planted with grass cover to control dust and particulate matter;

- Additional dust and particulate matter problems internal to the landfill are to be addressed as such problems arise. Remedial methods such as watering, treating unpaved roadways with a dust control spray or mixture, etc. may be performed as required.

[Rule 62-296.320(4)(c), F.A.C.; Application No. 1250008-006-AC]