New River Solid Waste Association
New River Regional Landfill

Facility ID No. 1250008
Union County

Title V Air Operation Permit Revision

Permit No. 1250008-005-AV
(Revision of Title V Air Operation Permit No. 1250008-003-AV)

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Northeast District
7825 Baymeadows Way, Suite B-200
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Permit No. 1250008-005-AV
New River Regional Landfill
Facility ID No. 1250008
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing New River Regional Landfill is located in Union County at 24276 N.E. 157th Street, Raiford, Florida. UTM Coordinates: Zone 17, 382.8 km East; 3330.3 km N. and Latitude: 30° 06′ 00′′ North and Longitude: 82° 13′ 00′′.

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:
Renewal Application Due Date: **September 3, 2013**
Expiration Date: **April 16, 2014**

(Draft/Proposed)

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

CLK/rfs

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

New River Regional Landfill, a municipal solid waste (MSW) landfill with a total site area of 200+ 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. Currently, 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 consists of three 800 scfm blowers and an open flare with a capacity of 2400 standard cubic feet per minute (scfm).

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Class I landfill/ Class III Landfill /gas collection system/ 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

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received September 15, 2010, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is not a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 002
40 CFR 60, Subpart WWW Standards of Performance for Municipal Solid Waste Landfills	001, 002
40 CFR 63, Subpart AAAA National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	001, 002
40 CFR 63, Subpart A, NESHAP General Provisions	001, 002
40 CFR 61, Subpart M National Emission Standard for Asbestos	001, 002
40 CFR 61, Subpart A, NESHAP General Provisions	001, 002
Rule 62-212. 400(12), F.A.C	001, 002

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

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

Emissions and Controls

FW2. **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department.

"Nothing was deemed necessary and ordered at this time."

[Rule 62-296.320(1), F.A.C. and initial Title V permit application received June 20, 2002]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

a. Establishment of vegetative cover on slopes;
b. Paving of the entrance to the facility;
c. Treatment of unpaved roads with water or dust control spray, as needed;

The above requirements are "not federally enforceable"

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in additional information response received November 15, 2002 for the Initial Title V permit application]

Annual Reports and Fees

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

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

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

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

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

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

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

[40 CFR 68]

Subsection A. Emissions Units 001 and 002

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

EU No.	Brief Description
-001	Class I Landfill and Class III Landfill
-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

Permitting Note: These emissions units are subject to 40 CFR Part 60, Subpart WWW adopted by reference in Rule 62-204.800(8)(b)72, F.A.C.; 40 CFR Part 63, Subpart AAAA adopted by reference in Rule 62-204.800(11)(b)58, F.A.C., and the Class III Landfill is subject to 40 CFR, Part 61, Subpart M-National Emission Standard for Asbestos.

This is an affected facility of 40 CFR 60, Subpart WWW adopted by reference in Rule 62-204.800(7)(b) 72, F.A.C due to the Class I and Class III Landfills having a design capacity equal or more than 2.5 million megagrams, and the facility commenced construction, reconstruction or modification on or after May 30, 1991.

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. The hours of operation are not restricted, i.e. 8760 hours per year of operation.

[Rule 62-4.160(2) and 62-210.200(PTE), F.A.C.]

A.2. Permitted Capacity - Flare. The maximum landfill gas (LFG) flow rate to the open flare is 2400 standard cubic feet per minute (scfm).

[Rule 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 1250008-004-AC]

A.3. Methods of Operation - Flare. Pilot fuel for the flare shall be LPG. LPG shall be used only for the purpose of igniting the flare and not be utilized as a supplemental fuel. The flare shall be operated at all times with a flame present and when emissions may be vented to it.

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

Standards for air emissions from municipal solid waste landfills

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

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

A.4. 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:

Condition A.4. Continued:

(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;

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

[40 CFR 60.752(b)(2)(ii)(A); OGC File No.08-0755]

A.5. Landfill Gas Control. All the collected gas shall be routed to a control system that complies with the requirements in either paragraph (a), (b) or (c) of this condition.

(a) An open flare designed and operated in accordance with 40 CFR 60.18 (see Section III, Subsection C);

(b) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in specific condition A.36.

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in specific condition A.18;

(c) Route 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 paragraph (a) or (b) of this condition.

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

A.6. Landfill Gas Collection and Control Device System – Operation. The owner or operator shall operate the collection and control device in accordance with the requirements of specific condition A.10 through A.32.

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

A.7. Landfill Gas Collection & Control Device System Capping or Closure. The collection and control system may be capped or removed provided that all the conditions of paragraphs (a), (b), and (c) of this condition are met:

(a) The landfill shall be a closed landfill as defined in 40 CFR 60.751 or specific condition A.8. A closure report shall be submitted to the Department as provided in specific condition A.38;

Condition A.7. Continued:

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

(c) Following the procedures specified in specific condition A.34, 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)]

A.8. Definition. *Closed landfill* means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 CFR 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of 40 CFR 258.60.

A.9. When a MSW landfill subject to 40 CFR 60, Subpart WWW is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR 70 or 71 and if the owner or operator meets the conditions for control system removal specified in specific condition A.7.

[40 CFR 60.752 (d)]

OPERATIONAL STANDARDS FOR COLLECTION AND CONTROL SYSTEMS.

A.10. Landfill Gas Collection System Operation. The owner or operator shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

(1) 5 years or more if active; or

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

[40 CFR 60.753(a)]

A.11. Wellhead Operation -Negative Pressure. The owner or operator shall operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in specific condition A.40;

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;

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

[40 CFR 60.753 (b)]

A.12. Wellhead Operation- Temperature and Oxygen/Nitrogen Content. The owner or operator shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55° C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).

(2) Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

(ii) A data recorder is not required;

(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

(iv) A calibration error check is not required;

(v) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

[40 CFR 60.753 (c)]

A.13. Landfill Gas Collection System – Surface Methane Concentration. The owner or operator shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

[40 CFR 60.753 (d)]

A.14. Landfill Gas Collection or Control System. The owner or operator shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with specific condition A.5. 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)]

A.15. Landfill Gas Control System – Operation. The owner or operator shall operate the control or treatment system at all times when the collected gas is routed to the system.

[40 CFR 60.753 (f)]

A.16. Landfill Gas Collection System - Corrective Action. If monitoring demonstrates that the operational requirement in specific condition A.11, A.12, or A.13 are not met, corrective action shall be taken as specified in specific condition A.26 and A.27 or specific condition A.30. If corrective actions are taken as specified, the monitored exceedance is not a violation of the operational requirements.

[40 CFR 60.753 (g)]

Monitoring of operations

A.17. Active Gas Collection System. The owner or operator seeking to comply with specific condition A.4.(A) for an active gas collection system shall install a sampling port and a thermometer other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in specific condition A.26 and;

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in specific condition A.27 and;

(3) Monitor temperature of the landfill gas on a monthly basis as provided in specific conditionA.27.

[40 CFR 60.756 (a)]

A.18. Enclosed Combustor. The owner or operator seeking to comply with Condition A.5 using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

(2) A device that records flow to or bypass of the control device. 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 60.756 (b)]

A.19. Open Flare. The owner or operator seeking to comply with specific condition A.5. using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(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 60.756 (c)]

A.20. Other Control Device. The owner or operator seeking to demonstrate compliance with specific condition A.5. using a device other than an open flare or an enclosed combustor 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, 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.

[40 CFR 60.756 (d)]

A.21. The owner or operator seeking to install a collection system that does not meet the specifications in specific condition A.47 through A.49 or seeking to monitor alternative parameters to those required by specific condition A.10 through A.32 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.

[40 CFR 60.756 (e)]

A.22. Landfill Surface Methane Concentration Monitoring. The owner or operator seeking to demonstrate compliance with specific condition A.30, shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in specific condition A.31. 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.

[40 CFR 60.756 (f)]

Compliance provisions

A.23. Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods in specific condition A.24 through A.28 shall be used to determine whether the gas collection system is in compliance with specific condition A.4.

[40 CFR 60.755 (a)]

A.24. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with specific condition A.4(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Department. If k has been determined as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years
c = time since closure, years (for an active landfill c = O and $e^{-kc} = 1$)

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

$$Q_M = \sum_{i=1}^{n} 2kLoMi \left(e^{-kt_i}\right)$$

where,

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

Condition A.24. Continued:

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (i) and (ii) of this condition. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

[40 CFR 60.755 (a)(1)]

A.25. For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2) or specific condition A.4. (A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Department, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

[40 CFR 60.755 (a)(2)]

A.26. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with specific condition A.4. (A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under specific condition A.11. 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. The owners or operators are not required to expand the system during the first 180 days after gas collection system startup.

[40 CFR 60.755 (a)(3) & (4)]

A.27. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in specific condition A.12. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Department for approval.

[40 CFR 60.755 (a)(5)]

A.28. An owner or operator seeking to demonstrate compliance with specific condition A.4. (A)(4) through the use of a collection system not conforming to the specifications provided in specific condition A.47 through A.49 shall provide information satisfactory to the Department as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

[40 CFR 60.755 (a)(6)]

A.29. For purposes of compliance with specific condition A.10, the owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

(1) 5 years or more if active; or

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

[40 CFR 60.755 (b)]

A.30. Compliance Determination with Surface Methane Operational Standard. The following procedures shall be used for compliance with the surface methane operational standard as provided in specific condition A.13.

(1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in specific condition A.31.

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of EPA Method 21, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs (4)(i) through (v) of this condition shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of specific condition A.13.

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

(ii) 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.

Condition A.30. Continued:

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (4)(v) of this condition shall be taken, and no further monitoring of that location is required until the action specified in paragraph (4)(v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (4) (ii) or (iii) of this condition 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 (4) (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

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

[40 CFR 60.755 (c)]

A.31. Instrumentation Specifications and Procedures for Surface Emissions Monitoring Device. The owner or operator seeking to comply with the provisions in specific condition A.30 shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in section 3 of EPA Method 21, except that ``methane'' shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in section 3.1.3 of EPA Method 21, the instrument evaluation procedures of section 4.4 of EPA Method 21 shall be used.

(4) The calibration procedures provided in section 4.2 of EPA Method 21 shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60.755 (d)]

A.32. The provisions of NSPS, 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.

[40 CFR 60.755 (e)]

Test methods and procedures

A.33. The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (i) or (ii) of this condition. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (i), for part of the life of the landfill and the actual year-to- year solid waste acceptance rate is unknown, as specified in paragraph (ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o. The facility shall use the NMOC concentration obtained from Tier 2 testing instead of default value of 4,000 parts per million by volume as hexane for the C_{NMOC}. For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_o M_i \left(e^{-kt_i}\right)\left(C_{NMOC}\right)\left(3.6 X 10^{-9}\right)$$

where,

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, year^{-1}
L_o = methane generation potential, cubic meters per megagram solid waste
Mi = mass of solid waste in the ith section, megagrams
t_i = age of the ith section, years
C_{NMOC} = concentration of NMOC, parts per million by volume as hexane
3.6 x 10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

(ii) The following equation shall be used if the actual year-to- year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_o R (e^{-kc} - e^{-kt}) (C_{NMOC}) (3.6 \times 10^{-9})$$

Condition A.33. Continued:

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
t = age of landfill, years
C_{NMOC} = concentration of NMOC, parts per million by volume as hexane
c = time since closure, years. For active landfill c = O and $e^{-kc}=1$
3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating a value for R, if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.754 (a)]

A.34. After the installation of a collection and control system in compliance with specific condition A.23 through A.32, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in specific condition A.7, using the following equation:

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

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

(1) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of EPA Method 2E.

(2) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in EPA Method 25C or EPA Method 18. If using EPA Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from EPA Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

[40 CFR 60.754 (b)]

A.35. When calculating emissions for PSD purposes, the owner or operator shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures.

[40 CFR 60.754 (c)]

A.36. For the performance test required in specific condition A.5.(B), EPA Method 25, 25C or Method 18 shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by 40 CFR 60.752(b)(2)(i)(B). EPA Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8ppm NMOC as Hexane), EPA Method 25A should be used in place of EPA Method 25. If using EPA Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$

where,
$NMOC_{in}$ = mass of NMOC entering control device
$NMOC_{out}$ = mass of NMOC exiting control device

[40 CFR 60.754 (d)]

A.37. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.38. Landfill Gas Sampling. The owner or operator shall sample the LFG at the sampling port prior to the flare on a monthly basis to obtain the following information:

a. Methane concentration of LFG (not required if CO test (s) is conducted).

b. Temperature of the LFG (not required if CO test is conducted).

c. Pressure of the LFG (not required if CO test is conducted).

[Rule 62-4.070(3), F.A.C.; Permit No. 1250008-004-AC]

Reporting requirements

A.39. The owner or operator shall submit an NMOC emission rate report to the Department initially and annually thereafter, except as provided for in paragraphs (1)(ii) or (b)(3) of this condition. The Department may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in specific condition No. A.33 or A.34, as applicable.

(i) After the initial report, subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (1)(ii) and (3) of this condition.

Condition A.39. Continued:

(A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or

(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) The owner or operator is exempted from the requirements of paragraphs (1) and (2) of this condition, after the installation of a collection and control system, during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.

[40 CFR 60.757 (b)]

A.40. Landfill Closure Notification. The owner or operator of a controlled landfill shall submit a closure report to the Department within 30 days of waste acceptance cessation. 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)]

A.41. Equipment Removal Report. The owner or operator of a controlled landfill shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with specific condition A.38;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

Condition A.40. Continued:

(iii) 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.

(2) The Department may request such additional information as may be necessary to verify that all of the conditions for removal in specific condition A.7 have been met.

[40 CFR 60.757 (e)]

A.42. Collection and Control System Monitoring Report The owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with specific condition A.4 shall submit to the Department annual reports of the recorded information in (1) through (6) of this condition. The initial annual 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 enclosed combustion devices and flares, reportable exceedances are defined under specific condition A.47.

(1) Value and length of time for exceedance of applicable parameters monitored under specific condition A.16 through A.19.

(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 A.17 and A.18.

(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.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in specific condition A.12 and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to specific condition A.24, A.27 and A.28 (4).

[40 CFR 60.757 (f)]

A.43. The owner or operator seeking to comply with specific condition A.5 shall include the following information with the initial performance test report required under 40 CFR 60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

Condition A.43. Continued:

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(6) The provisions for the control of off-site migration.

[40 CFR 60.757 (g)]

A.44. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Recordkeeping requirements

A.45. The owner or operator of an MSW landfill shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 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)]

A.46. The owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (1) through (4) of this condition 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) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with specific condition A.4:

(i) The maximum expected gas generation flow rate as calculated in specific condition A.24. 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.

(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in specific condition A.47 (1).

(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with specific condition A.5 through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

(i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

(ii) The percent reduction of NMOC determined as specified in specific condition A.5 achieved by the control device.

Condition A.46. Continued:

(3) Where an owner or operator seeks to demonstrate compliance with specific condition A.5 through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(4) Where an owner or operator seeks to demonstrate compliance with specific condition A.5 through use of an open flare, 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 40 CFR 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)]

A.47. The owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in specific condition A.17 through A.22 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) The following constitute exceedances that shall be recorded and reported under specific condition A.42.

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 ^{o}C below the average combustion temperature during the most recent performance test at which compliance with specific condition A.5 was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.

(2) Each owner or operator 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 specific condition A.18.

(3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with specific condition A.5 shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

Condition A.47. Continued:

(4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under specific condition A.19 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)]

A.48. The owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an 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.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under specific condition A.29.

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in specific condition A.47 as well as any nonproductive areas excluded from collection as provided in specific condition A.47(3)(ii).

[40 CFR 60.758 (d)]

A.49. 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 condition A.10 through A.16, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758 (e)]

<u>Specifications for active collection systems</u>

A.50. The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Department as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in paragraph (1) of this condition shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

Condition A.50. Continued:

(3) The placement of gas collection devices determined in paragraph (1) of this condition shall control all gas producing areas, except as provided by paragraphs (3)(i) and (3)(ii) of this condition.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under specific condition A.48. The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Department upon request.

(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 amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2\ k\ L_o\ M_i\ (e^{-kt}i)\ (C_{NMOC})\ (3.6\ \times 10^{-9})$$

where,

Q_i = NMOC emission rate from the ith section, megagrams per year
k = methane generation rate constant, year^{-1}
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of the degradable solid waste in the ith section, megagram
t_i = age of the solid waste in the ith section, years
C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume
3.6×10^{-9} = conversion factor

(iii) The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values or the alternative value for k, L_O and C_{NMOC} provided in specific condition A.33 shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (3)(i) of this condition.

[40 CFR 60.759 (a)]

A.51. The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[40 CFR 60.759 (b)]

A.52. The owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with specific condition A.5 through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (2) of this condition shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with specific condition A.24.

[40 CFR 60.759 (c)]

Other Requirements

A.53. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR Part 60, Subpart A – General Provisions and 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills.

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

A.54. 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.; Permit No. 1250008-004-AC]

A.55. Recordkeeping: In addition with the records required in the permit No.1250008-003-AV, the owner or operator shall also keep the following records to demonstrate that the facility is not a major stationary source due to CO emissions in accordance with Rule 62-212.400(PSD), F.A.C.

a. The total landfill gas flow rate to the flare.

b. The supporting information that the owner or operator uses to estimate the CO emissions. The information shall at least include the following:

   i. Temperature of the LFG (not required if CO test is conducted).

   ii. Methane concentration of LFG (not required if CO test is conducted).

   iii. Pressure of the LFG (not required if CO test is conducted).

   iv. Site specific CO emissions test data (if available).

c. CO emissions rate in tons/month and tons per 12 consecutive months. The owner or operator shall use the emissions factor of 750 lb CO/million dscf methane to estimate the CO emissions unless the owner or operator demonstrates to the department that an alternative emission factor (i.e. emissions factor developed from site specific test) is more accurate. The owner or operator shall keep record of how CO is estimated (can be in excel spread sheet).

[Rule 62-4.070(3) and 62-212.400(12), F.A.C.; Permit No. 1250008-004-AC]

Requirements of 40 CFR, Part 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

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

EU No.	Brief Description
-001	Class I Landfill and Class III Landfill
-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

Permitting Note: Pursuant to 40 CFR 63.1935 (a), the facility is an existing area source landfill of 40 CFR 63, Subpart AAAA.

Operating Requirements

B.1. The owner or operator is no longer required to comply with the requirements of this subsection when he/she is no longer required to apply controls as specified in specific condition A.7, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to the landfill.

[40 CFR 63.1950]

B.2. The owner or operator shall comply with the requirements of 40 CFR 60, Subpart WWW.

[40 CFR 63.1955 (a)(1)]

B.3. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the owner or operator shall follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that the facility shall comply with the SSM requirements in general provision of 40 CFR 63 shall submit compliance reports every 6 months as specified in specific condition B.8 and B.9, including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

[40 CFR 63.1955 (c)]

Compliance determination

B.4. Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under specific condition A.18.(1), A.19.(1), and A.20, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the owner or operator has failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, the owner or operator shall develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must

Condition B.4. Continued:

be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements.

[40 CFR 63.1960]

B.5. Three Hour Block Average Calculation for Compliance Demonstration. Averages are calculated in the same way as they are calculated in 40 CFR 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this condition are not to be included in any average computed under this subsection:

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

[40 CFR 63.1975]

Deviation

B.6. *Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by 40 CFR 63, Subpart AAAA, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
(3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by 40 CFR 63, Subpart AAAA.

[40 CFR 63.1990]

B.7. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this condition.

(a) A deviation occurs when the control device operating parameter boundaries described in specific condition A.47.(1) are exceeded.
(b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
(c) A deviation occurs when a SSM plan is not developed or maintained on site.

[40 CFR 63.1965]

Requirements of 40 CFR, Part 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

Recordkeeping and Reporting

B.8. Keep records and reports as specified in 40 CFR 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to the landfill, with one exception: The owner or operator shall submit the annual report described in specific condition A.42. every 6 months.

[40 CFR 63.1980 (a)]

B.9. The owner or operator shall also keep records and reports as specified in the general provisions of 40 CFR part 60 (see Appendix A) and 40 CFR part 63 (see Appendix C). Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

[40 CFR 63.1980 (b)]

Other Requirements

B.10. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR Part 63, Subpart A – General Provisions and 40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

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

General Control Device Requirements of 40 CFR 60.18- Open Flare.

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

EU No.	Brief Description
-001	Class I Landfill and Class III Landfill
-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

Control System Requirements

C.1. The owner or operator shall comply with the requirements as described by this subsection when the collected gases are routed to the open flare for control.

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

C.2. Visible Emissions Limitation. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in specific condition C.8, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

[40 CFR 60.18 (c)(1)]

C.3. Flares shall be operated with a flame present at all times, as determined by the methods specified in specific condition C.9.

[40 CFR 60.18 (c)(2)]

C.4. An owner/operator has the choice of adhering to either the heat content specifications in paragraph (ii) of this condition and the maximum tip velocity specifications in specific condition C.5, or adhering to the requirements in specific condition C.4.(i).

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation:

$$V_{max}=(X_{H2}-K_1)* K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference as specified in 40 CFR 60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in specific condition C.12.

General Control Device Requirements of 40 CFR 60.18- Open Flare.

Condition C.5. Continued:

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in specific condition C.11.

[40 CFR 60.18 (c)(3)]

C.5. Flares used to comply with this subsection shall be steam-assisted, air-assisted, or nonassisted.

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in specific condition C.12, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (ii) and (iii) of this condition.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in specific condition C.12, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in specific condition C.12, less than the velocity, V_{max}, as determined by the method specified in specific condition C.13 and less than 122 m/sec (400 ft/sec) are allowed.

[40 CFR 60.18 (c)(4) & (6)]

C.6. Owners or operators of flares shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Specific condition A.19 of Subsection A is stating how owners or operators of flares shall monitor these control devices.

[40 CFR 60.18 (d)]

C.7. Flares shall be operated at all times when emissions may be vented to them.

[40 CFR 60.18 (e)]

<u>Performance Tests and Procedures</u>

C.8. <u>Visible Emissions Test</u>. EPA Method 22 shall be used to determine the compliance of flares with the visible emission limitation as stated by specific condition C.2. The observation period is 2 hours and shall be used according to EPA Method 22. The test shall be conducted each federal fiscal year (October 1 – September 30).

[40 CFR 60.18 (f) (1) and Rule 62-297.310 (7)(a), F.A.C.]

C.9. <u>Presence of Flame</u>. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

[40 CFR 60.18 (f)(2)]

General Control Device Requirements of 40 CFR 60.18- Open Flare.

C.10. Within 60 days after achieving the maximum production rate at which the open flare will be operated, but not later than 180 days after initial startup of the flare, the owner or operator shall conduct test to demonstrate initial compliance with the requirements of specific condition C.4. After the initial compliance test, the subsequent test shall be conducted prior to permit renewal.

[40 CFR 60.8 (a), Rule 62-297.310 and 62-4.070, F.A.C.]

C.11. Net Heating Value. 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 off gas 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;

$$K = \text{Constant, } 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); 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 40 CFR 60.17) if published values are not available or cannot be calculated.

[40 CFR 60.18 (f)(3)]

C.12. Actual Exit Velocity. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by EPA Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

[40 CFR 60.18 (f)(4)]

General Control Device Requirements of 40 CFR 60.18- Open Flare.

C.13. Maximum Permitted Velocity. The maximum permitted velocity, V_{max}, for flares complying with specific condition C.5 (iii) shall be determined by the following equation.

$$\mathbf{Log_{10}(V_{max})=(H_T+28.8)/31.7}$$

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

28.8 = Constant

31.7 = Constant

H_T = The net heating value as determined in specific condition C.11.

[40 CFR 60.18 (f)(5)]

Common Conditions

C.14. General Provision of 40 CFR 60. The unit under this subsection also subject to the applicable requirements from general provision of 40 CFR 60 (see Appendix A).

[40 CFR 60.1]

Requirements of 40 CFR, Part 61, Subpart M, National Emission Standard for Asbestos.

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

EU No.	Brief Description
-001	Class I Landfill and Class III Landfill

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity**.** The maximum volume of waste to be accepted at the Class III facility shall not exceed 100 tons per day.

[Rule 62-4.160(2), F.A.C.; 62-210.200(PTE), F.A.C.; Solid Waste Permit No. 13500-012-SC]

D.2. Hours of Operation. The facility shall be limited to operating from 7:00 A.M. to 6:00 P.M. Monday through Friday and from 7:00 A.M. to 12:00 P.M Saturday.

[Rule 62-4.160(2), F.A.C.; 62-210.200(PTE), F.A.C.; Solid Waste Permit No. 13500-012-SC]

Emission Limitations and Standards for Active Disposal Site

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.3. Accepted Asbestos. Regulated asbestos accepted for disposal at the landfill shall be in a wetted condition and double bagged in 6-mil plastic bags to prevent escape of the material to the outside air.

D.4. Asbestos Waste Disposal. Regulated asbestos waste shall only be disposed in a designated asbestos disposal area, within the Class III landfill, while a qualified and designated landfill employee supervises the activity.

[Solid Waste Permit No. 13500-012-SC]

D.5. Cover. Asbestos waste shall immediately be covered with either one foot of clean soil or three feet of solid waste that does not contain asbestos and shall continue to meet the initial cover requirements in specific condition 23 of Solid Waste Permit No. 13500-012-SC.

[40 CFR 61.154(c)(1), subsumed, Solid Waste Permit No. 13500-012-SC]

D.6. Warning Signs. Warning signs and fencing must be installed and maintained as follows:

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements of 51 cm × 36 cm (20&inch;×14&inch;) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

Requirements of 40 CFR, Part 61, Subpart M, National Emission Standard for Asbestos.

Condition D.6. Continued:

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

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

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

[40 CFR 61.154(b)(1) and (2)]

Recordkeeping

D.7. Records. For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4 below, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(v) The date of the receipt.

Requirements of 40 CFR, Part 61, Subpart M, National Emission Standard for Asbestos.

Condition D.7. Continued:

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

For Figure 4 (refer to Appendix F)

[40 CFR 61.154(e)]

D.8. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

[40 CFR 61.154(f)]

D.9. Records – Inspections. Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under 40 CFR 61.154.

[40 CFR 61.154(i); Solid Waste Permit No. 13500-012-SC]

Reporting Requirements

D.10. Closure- Disposal Locations/Quantities. Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

[40 CFR 61.154(h)]

D.11. Notification of Excavation. Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

Condition D.11. Continued:

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site. (Secs. 112 and 301(a) of the Clean Air Act as amended (42 U.S.C. 7412, 7601(a))

[40 CFR 61.154(j)]

Landfill Closure Requirements

D.12. Upon closure, the owner or operator shall comply with all the following conditions for inactive waste disposal sites.

[40 CFR 61.154(g)]

Standards for Inactive Disposal Site

D.13. The owner or operator shall comply with one of the following:

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or

(2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or (4) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (1), (2), and (3) of this Condition. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

[40 CFR 61.151(a)]

Requirements of 40 CFR, Part 61, Subpart M, National Emission Standard for Asbestos.

D.14. Warning Signs. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph (2) or (3).

(1) Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements for 51 cm×36 cm (20&inch;×14&inch;) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

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

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

[40 CFR 61.151(b)]

D.15. Alternative Control Methods. The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of Conditions D.13. and D.14.

[40 CFR 61.151(c)]

Requirements of 40 CFR, Part 61, Subpart M, National Emission Standard for Asbestos.

D.16. Excavation. Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

[40 CFR 61.151(d)]

D.17. Deed Notation. Within 60 days of a site becoming inactive and after the effective date of Conditions A.18. through A.22., record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material;

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in Condition A.8. have been filed with the Administrator; and

(3) The site is subject to 40 CFR Part 61, Subpart M.

[40 CFR 61.151(e)]

Other Requirements

D.18. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR Part 61, Subpart A – General Provisions and 40 CFR 61 Subpart M - National Emission Standard for Asbestos.

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

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills.
Appendix Definitions, Subpart WWW and Subpart AAAA
Appendix NESHAP Part 61, Subpart A, General Provisions
Appendix NESHAP Part 61, Subpart M -National Emission Standard for Asbestos.
Appendix NESHAP Part 61, Subpart M Figure 4
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix -Candlestick Flare System Startup, Shutdown and Operating Procedures
Appendix - Alternate Standards for Low Gas Production Wells and Leachate Risers.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.