

Santa Rosa County Board of County Commissioners

Santa Rosa County Central Landfill

Facility ID No. 1130172

Santa Rosa County

Initial Title V Air Operation Permit

Permit No. 1130172-007-AV



Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
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Mail Station #5505
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Compliance Authority:

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Initial Title V Air Operation Permit

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PERMITTEE:

Santa Rosa County Board of County Commissioners
6065 Old Bagdad Highway
Milton, Florida 32583

Permit No. 1130172-007-AV
Santa Rosa County Central Landfill
Facility ID No. 1130172
Initial Title V Air Operation Permit

The purpose of this permit is to issue the initial Title V air operation permit for the above referenced facility. The existing Santa Rosa County Central Landfill is located in Santa Rosa County at 6337 Da Lisa Road, Milton. UTM Coordinates are: Zone 17, 81.6 km East and 3398.4 km North. Latitude is: 30° 34' 36" North; and, Longitude is: 87° 03' 35" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 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: January 4, 2015
Renewal Application Due Date: May 23, 2019
Expiration Date: January 3, 2020

for: Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/dr/ejs

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility consists of a municipal solid waste landfill (Class I and Class III); a stationary air curtain incinerator; and a voluntarily installed gas collection system with an open candlestick flare.

The landfill area contains a Class I Municipal Solid Waste (MSW) Landfill and a Class III Landfill. The Class I Landfill disposal area started operating in 1978 and is approximately 39.03 acres, of which 18.02 acres are new and 21.01 acres high-rise over an existing closed Class I Landfill with a single liner. The Class III Landfill disposal area is approximately 44.27 acres of which 24.47 acres are operating and 19.8 acres are new. The landfill design capacity is 2.56 million Mg by mass as reported in the Initial Design Capacity Report dated October 5, 2006.

The air curtain incinerator is refractory-lined chamber with a Phelps Fan Company Model B-61 air curtain system. The air supply system is a squirrel case type fan driven by a diesel engine. The refractory-lined pit measuring 10 feet wide by 30 feet long by 10 feet deep is a modular based design and was fabricated by Simonds Manufacturing Corporation.

The open "candlestick" flare is designed to continuously burn landfill gas. The flare is manufactured by LFG Specialties, L.L.C., utility flare Model No. PCF62216. The maximum flow rate of landfill gas to the flare is 750 SCFM. The flare's height is 22 feet with an exit diameter of 1.5 feet.

Other activities occurring at the landfill includes wood waste processing and temporary storage, white goods temporary storage, household hazardous waste collection and temporary storage, used oil collection and temporary storage, diesel fuel storage tanks, scrap tire temporary storage, asbestos disposal pit, equipment maintenance building with hydraulic and motor oil storage, electronic waste collection and temporary storage, oil, gas, and battery removal from lawn mowers and similar equipment, and lead-acid battery temporary storage.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Air Curtain Incinerator
002	Open Flare
003	Municipal Solid Waste Landfill

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received August 21, 2014, this facility is not a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A, NSPS General Provisions	001, 003
40 CFR 60, Subpart WWW	003
40 CFR 60, Subpart DDDD	001
40 CFR 61 Subpart A – General Provisions - NESHAP	003
40 CFR 61 Subpart M (Set A) – NESHAP For Asbestos	003

SECTION I. FACILITY INFORMATION.

Regulation	EU No(s).
<i>State Rule Citations</i>	
Rule 62-4, Florida Administrative Code (F.A.C.) (Permitting Requirements)	001, 002, 003
Rule 62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	001, 002, 003
Rule 62-296.320(4), F.A.C. (Unconfined Particulate Matter and Visible Emissions)	001, 002, 003
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	001, 002, 003
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)	001, 002, 003
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	001, 002, 003

SECTION II. FACILITY-WIDE CONDITIONS.

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

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

Emissions and Controls

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

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

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

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), 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. Monitor established vegetation growth on the cap.
 - b. If high volume traffic is expected, the County will spray roads with water to prevent fugitive dust emissions.
 - c. On-site construction projects will utilize best management practices in preventing fugitive emissions.
- [Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received August 21, 2014.]

Annual Reports and Fees

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

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection’s Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP’s Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source’s most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source

SECTION II. FACILITY-WIDE CONDITIONS.

showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available 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>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}

FW7. 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 (b), F.A.C.]

FW8. 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 electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www.epa.gov/osweroel/content/rmp/index.htm>. The RMP Reporting Center can be contacted at: 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

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

EU No.	Brief Description
001	Air Curtain Incinerator

The air curtain incinerator is refractory-lined chamber with a Phelps Fan Company Model B-61 air curtain system. The air supply system is a squirrel case type fan driven by a diesel engine. The refractory-lined pit measuring 10 feet wide by 30 feet long by 10 feet deep is a modular based design and was fabricated by Simonds Manufacturing Corporation.

{Permitting note: This emission unit is subject to the specific requirements of Rule 62-296.401(7), F.A.C., and 40 CFR 60, Subpart DDDD, Standards of Performance for Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units, which is incorporated by reference at Rule 62-204.800, F.A.C. The more stringent criteria have been included in this permit where there are differences in specific criteria, such as the opacity limitation from Rule 62-296.401(7), and the exclusion of the general excess emissions rule (Rule 62-210.700, F. A. C.).}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The operation rate, at which compliance with standards shall be demonstrated, shall be determined by charging the pit at a representative maximum capacity, i.e., up to the air curtain, with representative material to be burned.

[Rules 62-296.401(7)(b) and 62-4.070, F.A.C.]

{Permitting Note: Maximum operating rates are for compliance testing only. The ACI does not operate continuously. The ACI capacity is limited by several factors including the chamber volume, the height of the air curtain, the tons of material that can be burned per year and the operational time restrictions, such as charging not before sunrise and no later than one hour after sunset.}

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

A.3. Methods of Operation.

- The only materials that shall be burned in the air curtain incinerator are vegetative material and untreated wood, excluding sawdust. The air curtain incinerator shall not be used to burn any biological waste, hazardous waste, asbestos-containing materials, mercury-containing devices, pharmaceuticals, tires, rubber material, residual oil, used oil, asphalt, roofing material, tar, treated wood, plastics, garbage, or trash or other material prohibited to be open burned as set forth in subsection 62-256.300(2), F.A.C. [Rule 62-296.401(7)(b)3. and 62-4.070, F.A.C.]
- Only kerosene, diesel fuel, drip-torch fuel (as used to ignite prescribed fires), untreated wood, virgin oil, natural gas, or liquefied petroleum gas may be used to start the fire in the air curtain incinerator. The use of used oil, chemicals, gasoline, or tires is prohibited. [Rule 62-296.401(7)(b)3., F.A.C.]
- In no case shall the air curtain incinerator be started before sunrise, and all charging shall end no later than one hour after sunset. After charging ceases, air flow shall be maintained until all material within the air curtain incinerator has been reduced to coals, and flames are no longer visible. A log shall be maintained onsite that documents daily beginning and ending times of charging. [Rule 62-296.401(7)(b)5., F.A.C.]
- An air curtain incinerator shall be attended at all times while materials are being burned or flames are visible within the incinerator. [Rule 62-296.401(7)(b)6., F.A.C.]
- The air curtain incinerator shall be located at least 50 feet from any wildlands, brush, combustible structure, or paved public roadway. The pit shall not be dug within a previously active portion of a landfill. If the air curtain incinerator employs an earthen trench, the pit walls (width and length) shall be vertical, and maintained as such, so that combustion of the waste within the pit is maintained at an adequate temperature and with sufficient air recirculation to provide enough residence time and mixing

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

for proper combustion and control of emission. The following dimensions for the pit must be strictly adhered to: no more than 12' wide, between 8' and 15' feet deep, and no longer than the length of the manifold. [Rule 62-296.401(7)(b)2. & 7., F.A.C.]

- f. The material shall not be loaded into the air curtain incinerator such that it will protrude above the air curtain. [Rule 62-296.401(7)(b)8., F.A.C.]
- g. Ash shall not be allowed to build up in the pit of the air curtain incinerator to higher than one-third (1/3) the pit depth or to the point where the ash begins to impede combustion, whichever occurs first. Pit depth is the height of the air curtain from the incinerator floor. [Rule 62-296.401(7)(b)9., and 62-4.070, F.A.C.]
- h. In the event the incinerator is repositioned to a different area of the landfill, the permittee shall notify the Department in writing within five calendar days of the date of the move, and shall include a diagram of the new location.
[Rule 62-4.070, F.A.C.]

A.4. Hours of Operation. This emissions unit shall not operate continuously. In no case shall the ACI be started before sunrise and all charging shall end no later than one hour after sunset. The emissions unit shall not operate if the limit of 5000 tons of material burned per year has been reached. [Rules 62-4.160(2), 62-210.200(PTE), and 62-296.401(7)(b)5. F.A.C.; and, Permit No. 1130172-001-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **A.5.** and **A.6.** are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. Outside of startup periods, visible emissions shall not exceed 10 percent opacity, six-minute average, with the exception of malfunctions, which shall not exceed three hours. [Rules 62-296.401(7)(b)1. & 62-204.800(9)(f), F.A.C.; and, 40 CFR 60.2860]

A.6. Visible Emissions. During startup periods, which shall not exceed the first 30 minutes of operation, an opacity of up to 35 percent, averaged over a six-minute period, shall be allowed, with the exception of malfunctions which shall not exceed three hours. [Rule 62-296.401(7)(b)1., F.A.C. and 40 CFR 60.2860]

A.7. PM Emissions. Particulate emissions shall not exceed 5 tons per year. This limit is ensured by incinerating less than 5,000 tons of material per year. [Permit No. 1130172-001-AC]

Excess Emissions

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

A.8. Excess Emissions. The general excess emissions rule, Rule 62-210.700, F.A.C., shall not apply to the operation of air curtain incinerators. [Rules 62-296.401(7)(b)1. & 62-204.800(9)(f), F.A.C.; and, 40 CFR 60.2860.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.9. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C. and Permit No. 1130172-001-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

- A.10. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.11. Annual Compliance Tests Required.** During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards for opacity. The annual compliance test performed during the federal fiscal year prior to renewal of the permit satisfies the requirement to test prior to permit renewal. [Rules 62-210.300(2)(a) and 62-297.310(7), F.A.C.]
- A.12. Visible Emissions Testing Requirements.** Visible Emissions tests are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. The visible emissions tests shall be conducted in accordance with EPA Method 9 for 90 minutes, as follows:
- (1) for one-half hour upon start-up, during the first 30 minutes of operation, to verify compliance with the 35% opacity limitation of Rule 62-297.401(7)(b)1., F.A.C., and 40 CFR 60.2860
 - (2) for one hour subsequent to the half-hour start-up period, to verify compliance with the 10% opacity limitations of Rule 62-297.401(7)(b)1., F.A.C., and 40 CFR 60.2860
- [Rules 62-4.070, 62-297.310(7), and 62-297.401(9), F.A.C.]

Recordkeeping and Reporting Requirements

- A.13. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]
- A.14. Operating Log.** A daily operating log shall be maintained, including as a minimum the following information:
1. Time charging began
 2. Time charging ended
 3. Date of operation
 4. Tons of material burned
 5. Maintenance performed
 6. Any additional comments
 7. Operators verification statement and signature
- This log shall be maintained at the facility for at least five years and shall be made available to the Department upon request. [Rules 62-4.070, and 62-296.401(7)(b)5., F.A.C.]
- A.15. Material Records.** Records of the tons of material burned per year shall also be kept and be available for inspection upon request to demonstrate compliance with the annual limitation of 5000 tons of material burned per year. [Rule 62-4.070, F.A.C., and construction permit 1130172-001-AC]
- A.16. Test Results Records.** Records of the results of all initial and annual visible emission tests shall be kept by the owner or operator in either paper copy or electronic format for at least five years. These records shall be made available to the Department or for an inspector's onsite review upon request. [Rule 62-296.401(7)(c)3 and 40 CFR 60.2870]

Other Requirements

- A.17. Operation and Maintenance Guide and Training.** A copy of this permit and a current detailed operation and maintenance guide shall be made available on-site to the operators of the air curtain incinerator at all times. The owner shall provide training in the operation and maintenance of the air curtain incinerator and permit requirements to all operators before allowing them to work at the air curtain incinerator. This guide shall be made available to the Department or for an inspector's onsite review upon request. [Rules 62-296.401(7)(b)10. and 62-4.070, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 002

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

EU No.	Brief Description
002	Open Flare

This emissions unit is a “candlestick” flare to continuously burn landfill gas. The flare is manufactured by LFG Specialties, L.L.C., utility flare Model No. PCF62216. The maximum flow rate of landfill gas to the flare is 750 SCFM. The flare’s height is 22 feet with an exit diameter of 1.5 feet.

{Permitting Note: The flare and landfill gas collection system are not specifically required by state rules nor have they been installed to satisfy the control requirements of NSPS Subpart WWW. The Tier 2 NMOC emission rate is estimated to be below 50 megagrams per year over the next five years. The landfill owner voluntarily installed the Open Flare to control collected landfill gas. The landfill gas collection system was installed under a permit from solid waste permitting.}

Essential Potential to Emit (PTE) Parameters

- B. 1. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- B. 2. Methods of Operation - *Fuels*.** The fuel allowed to be burned in this unit is landfill gas. [Rule 62-213.410, F.A.C.; and, Permit No. 1130172-005-AC.]
- B. 3. Methods of Operation - *Capacity*.** The maximum heat input rate of the open flare shall not exceed 24.75 MMBtu/hr and the maximum process throughput rate shall not exceed 750 scfm of landfill gas. [Permit No. 1130172-005-AC]
- B. 4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

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

- B. 5. Visible Emissions.** Visible emissions from the Open Flare shall not exceed 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.; and, Permit No. 1130172-005-AC.]

Excess Emissions

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

- B. 6. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- B. 7. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

MONITORING REQUIREMENTS

- B. 8. Operation and Maintenance.** The permittee shall operate and maintain the open flare in accordance with the Operation and Maintenance Plan submitted with the permit application. [Permit No. 1130172-005-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 002

Test Methods and Procedures

- B. 9. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares (30 minute)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; and, Permit No. 1130172-005-AC]

- B. 10. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

- B. 11. Compliance Tests Prior To Renewal.** During the federal fiscal year (October 1 to September 30) preceding the Air Operation Permit Renewal, the Open Flare shall be tested for Visible Emissions to demonstrate compliance with the emission limits in Specific Condition **B.5**. Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us.

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

Recordkeeping and Reporting Requirements

- B. 12. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 003

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

EU No.	Brief Description
003	Municipal Solid Waste Landfill

This facility is an operating Class I Municipal Solid Waste (MSW) Landfill and Class III Landfill in Santa Rosa County. The Class I Landfill disposal area started operating in 1978 and is approximately 39.03 acres, of which 18.02 acres are new and 21.01 acres high-rise over an existing closed Class I Landfill with a single liner. The Class III Landfill disposal area is approximately 44.27 acres of which 24.47 acres are operating and 19.8 acres are new. The landfill design capacity is 2.56 million Mg by mass as reported in the Initial Design Capacity Report dated October 5, 2006. Tier 1 Non Methane Organic Compounds (NMOC) emissions rates using LandGem modeling exceeded the 50 megagram per year threshold. The Tier 2 NMOC emission rate is estimated to be below 50 megagrams per year over the next five years. Asbestos containing material is also disposed in the landfill. This facility does not contain any cells that qualify as a bioreactor.

{Permitting Note: The October 5, 2006 expansion caused the landfill to be regulated under NSPS 40 CFR 60, Subpart WWW, "Standards of Performance for Municipal Solid Waste Landfills", adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C. The landfill is not subject to 40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, because the facility is not a major source of HAP as defined in 40 CFR 63.2 Subpart A, it is not collocated with a major source, it does not include a bioreactor and the uncontrolled NMOC emission rate is projected to be less than 50 megagrams per year through 2018. This emission unit is also subject to the requirements of 40 CFR 61 National Emission Standard for Hazardous Air Pollutants (NESHA) Subpart M (National Emission Standard for Asbestos), as adopted and incorporated by reference in Rule 62-204.800(10)(b) 8., F.A.C., as they apply to asbestos disposal.}

Essential Potential to Emit (PTE) Parameters

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

C.2. NMOC Emission Rate. Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of 40 CFR 60.752 or calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements. [40 CFR 60 Subpart WWW]

(a) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(1) Submit an annual emission report to the Administrator, except as provided for in 40 CFR 60.757(b)(1)(ii); and

(2) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(i) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of 40 CFR 60.752, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of 40 CFR 60.752.

(ii) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in 40 CFR 60.757(d). [40 CFR 60.752(b)]

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- C.3. Asbestos Disposal.** Permittee is subject to the requirements of 40 CFR 61.154 for the disposal of covered asbestos containing wastes. [40 CFR 61.154]
- C.4. Asbestos Disposal.** Upon closure, comply with all the provisions of 40 CFR 61.151. [40 CFR 61.154(g)]
- C.5. Asbestos Disposal.** Permittee shall comply with at least one of the following requirements of a, b or c:
- a) There must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or
 - b) At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
 - (1) Be covered with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material, or
 - (2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used with prior approval by the Administrator. For purposes of the paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
 - c) Use an alternative emissions control method that has received prior written approval by the Administrator according to procedures described in 61.149(c)(2).

Unless a natural barrier adequately deters access by the general public, either warning signs or fencing must be installed and maintained as described in 61.154(b), or the requirements of (b)(1) above must be met.. [40 CFR 61.154(a), (b), (c) and (d)]

Control Technology

- C.6. Landfill Gas Collection and Control System.** If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:
- (a) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within one year. [[40 CFR 60.752(b)(2)(i)]

Monitoring of Operations

- C.7. Calculation of the NMOC Emission Rate.**
- (a) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of 40 CFR 60.754 or the equation provided in paragraph (a)(1)(ii) of 40 CFR 60.754. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(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 (a)(1)(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_0 , and 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 meteorological site, the k value to be used is 0.02 per year.
 - (1) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

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$$M_{NMOC} = \sum_{i=1}^n 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

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

M_i = mass of solid waste in the i^{th} section, megagrams

t_i = age of the i^{th} section, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

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 the value for M_i if documentation of the nature and amount of such wastes is maintained

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

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

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 $c=0$ 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 the value of R , if documentation of the nature and amount of such wastes is maintained.

- (b) *Tier 1.* The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.
- (1) If the NMOC emission rate calculated in paragraph (a)(1) of 40 CFR 60.754 is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR 60.752(b)(1).
- (2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with 40 CFR 60.752(b)(2), or determine a site-specific NMOC

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concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (a)(3) of 40 CFR 60.754.

- (c) *Tier 2.* The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of Appendix A of this part. Method 18 of Appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to C_{NMOC} as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of Appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.
- (1) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of 40 CFR 60.754 and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of 40 CFR 60.754.
- (2) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with 40 CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in paragraph (a)(4) of 40 CFR 60.754.
- (3) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR 60.754.
- (d) *Tier 3.* The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of 40 CFR 60.754 and using a site-specific methane generation rate constant k , and the site-specific NMOC concentration as determined in paragraph (a)(3) of 40 CFR 60.754 instead of the default values provided in paragraph

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(a)(1) of 40 CFR 60.754. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(1) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with 40 CFR 60.752(b)(2).

(2) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in 40 CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40 CFR 60.757(b)(1) using the equations in paragraph (a)(1) of 40 CFR 60.754 and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of 40 CFR 60.754. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

(e) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of 40 CFR 60.754 if the method has been approved by the Administrator.

[40 CFR 60.754(a); and, Air Permit No. 1130172-005-AC, Specific Condition 9.]

Recordkeeping and Reporting Requirements

C.8. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
NMOC Emission Rate Reports	Initially and Annually Thereafter	C.10.
Facility Closure Report	Within 30 days of Waste Acceptance Cessation	C.11.

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

C.9. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

C.10. NMOC Emission Rate Reports. Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (1)(ii) or (3) of 40 CFR 60.757(b). The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(a) The NMOC emission rate report shall contain an annual or five-year estimate of the NMOC emission rate calculated using the formula and procedures provided in Specific Condition **A.7**.

(1) 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 five consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next five-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 five 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 five years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five-year estimate, a revised five-year

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estimate shall be submitted to the Administrator. The revised estimate shall cover the five-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

- (b) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or five-year emissions.
- (c) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (1) and (2) of 40 CFR 60.757, after the installation and in compliance operation of a collection and control system.

[40 CFR 60.757(b)]

C.11. Facility Closure Report. Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance to 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill. [40 CFR 60.757(d)]

C.12. Asbestos Records and Reports. Permittee shall maintain records and reports in accordance with 40 CFR 61.154(e) and for a period of at least five years. [40 CFR 61.154(e)]

C.13. Asbestos Location Records. Permittee shall maintain, until closure, location records of the asbestos containing waste subject to 40 CFR 61.154 in accordance with 40 CFR 61.154(f). [40 CFR 61.154(f)]

Other Requirements

C.14. Requirement for Title V Permit. When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if the following condition is met:

- (a) The landfill was never subject to the requirement for a control system (GCCS). [40 CFR 60.752(d)]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

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

Appendix 40 CFR 60 Subpart A – General Provisions.

Appendix 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.

Appendix 40 CFR 60 Subpart DDDD – Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

Appendix 40 CFR 61 Subpart A – General Provisions - NESHAP

Appendix 40 CFR 61 Subpart M (Set A) – NESHAP for Asbestos.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.