

Indian River County Solid Waste Disposal District
Indian River County Landfill

Facility ID No. 0610015
Indian River County

Title V Air Operation Permit Renewal

Permit No. 0610015-004-AV
(Renewal of Title V Air Operation Permit No. 0610015-003-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Central District
3319 Maguire Boulevard, Suite 232
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Table of Contents

<u>Section</u>	<u>Page Number</u>
I. Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Units.	2
C. Applicable Regulations.	2
II. Facility-wide Conditions.	3
III. Emissions Units and Conditions.	
A. EU 003, Municipal Solid Waste Landfill with Flare.	5
B. EU 004, Emergency Standby Generator	7
IV. Appendices.	9
Appendix A, Glossary.	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix NESHAP, Subpart A – General Provisions.	
Appendix NESHAP, Subpart AAAA – Municipal Solid Waste Facilities.	
Appendix NSPS, Subpart A – General Provisions.	
Appendix NSPS, Subpart WWW – Municipal Solid Waste Landfills.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Referenced Attachments.	At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).	
Table 1, Summary of Monitoring Requirements for Municipal Solid Waste Landfills.	
Table 2, Summary of Recordkeeping Requirements for Municipal Solid Waste Landfills.	
Table 3, Summary of Reporting Requirements for Municipal Solid Waste Landfills.	
Table H, Permit History.	

DRAFT/PROPOSED PERMIT

PERMITTEE:

Indian River County
Solid Waste Disposal District
1325 74th Avenue S.W.
Vero Beach, Florida 32968

Permit No. 0610015-004-AV
Indian River County Landfill
Facility ID No. 0610015
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Indian River County Landfill is located in Indian River County at 1325 74th Avenue S.W., Vero Beach, Florida. UTM Coordinates are: Zone 17, 551.28 East and 3050.79 North. Latitude is: 27°34'48.1848" North; and, Longitude is: 80°28'49.4932" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: TBD
Renewal Application Due Date: TBD
Expiration Date: TBD

(Draft/Proposed)

Caroline D. Shine
Air Program Administrator

May 23, 2012
Date

CDS/jr/ngm

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The Indian River County Landfill is identified as emissions unit 003 (E.U. 003). The landfill is a Class I landfill occupying an area of approximately 70 acres, comprising of Segments 1 and 2, and infill connecting Segments 1 and 2. The landfill produces fugitive emissions of landfill gas controlled by a landfill gas collection and control system (LGCCS) consisting of vertical and horizontal extraction wells, a network of pipelines, and a flare system. The flare system includes three (3) blowers that maintain the landfill under vacuum. Landfill gas is pulled by the vacuum to the flare where combustible components are oxidized to CO₂ and H₂O.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
003	Municipal Solid Waste Landfill with Flare
004	Emergency Standby Generator

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received January 04, 2012, this facility is not a major source of hazardous air pollutants (HAP).

A summary of applicable regulations is shown in the following table.

Regulation	EU No.
40 CFR 60, Subpart A, NSPS General Provisions	-003
40 CFR 60, Subpart WWW, NSPS Municipal Solid Waste Landfills	-003
40 CFR 63, Subpart A, NESHAP General Provisions	-003
40 CFR 63, Subpart AAAA, NESHAP Municipal Solid Waste Facilities	-003
40 CFR 60, Subpart IIII, Standards of Performance for Compression Ignition Internal Combustion Engines and Rule 62-4.070 and 62-204.800(8)(b)79., F.A.C.	-004
40 CFR 63, Subpart ZZZZ, NESHAP Stationary Reciprocating Internal Combustion Engines and Rule 62-4.070 and 62-204.800(11)(b)82., F.A.C.	-004
State Rule Citations: 62-4.070, 62-210.200, 62-213.420, 62-296.405, 62-296.320, 62-297.310	-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. To comply, procedures to minimize pollutant emissions shall include the following:

- a. Tightly cover or close all VOC containers when they are not in use;
- b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc.;
- c. Maintain all piping, valves, fittings, etc. in good operating condition;
- d. Prevent excessive air turbulence across exposed VOC; and
- e. Immediately confine and clean up spills of VOC containing materials.

[Rule 62-296.320(1), F.A.C.]

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. Paving and maintenance of roads, parking areas, and yards.
- b. Application of water to control emissions from such activities as traffic on unpaved roads, landfilling operations, and exposed areas of the landfill cells.
- c. Removal of particulate matter from roads and other paved areas to prevent re-entrainment.
- d. Landscaping inactive areas of landfill cells and stormwater runoff conveyance systems.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit application received January 04, 2012.]

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.]

SECTION II. FACILITY-WIDE CONDITIONS.

- 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 003

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

EU No.	Brief Description
-003	<p>This emissions unit is a Class I landfill for disposal of Municipal Solid Waste (MSW) and C&D debris generated. The landfill produces fugitive emissions of landfill gas (non-methane organic compounds (NMOC)) through anaerobic decomposition of the biodegradable portion of waste. Approximately 85 percent of the NMOC emissions are considered to be volatile organic compounds (VOC).</p> <p>The fugitive emissions are controlled by an active LGCCS that flares the combustible components of the gas (primarily methane) to CO₂ and H₂O.</p>

Essential Potential to Emit (PTE) Parameters

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

Emission Limitations and Standards

- A.3. 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, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). [Rule 62-296.320(4)(b)1., F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Tables 2 and 3, Summary of Compliance Requirements for Municipal Solid Waste Landfills, summarize information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- A.4. Test Methods.** 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 flare must be tested for visible emissions in accordance with EPA Method 9. The test shall last 30 minutes.

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. [40 CFR 60; 62-297.401, F.A.C.]

- A.5. 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 003

- A.6. Annual Compliance Tests Required.** During each federal fiscal year (October 1st to September 30th), the flare shall be tested to demonstrate compliance with the emissions standards for visible emissions specified in Specific Condition No. **A.3.** [Rule 62-297.310(7), F.A.C.]

Recordkeeping and Reporting Requirements

- A.7. Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
- A.8. VE Test Reporting Requirement.** The type of fuel and the heat input to this source must be entered on the visible emission test report. [Rules 62-4.070 and 62-210.200(PTE), F.A.C.]

Other Requirements

- A.9. Federal NSPS Requirements.** In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart WWW – Municipal Solid Waste (MSW) Landfills (attached and part of this permit). [Rule 62-213.440, F.A.C.]
- A.10. Federal NESHAP Requirements.** In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart AAAA – MSW Facilities (attached and part of this permit). [Rule 62-213.440, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 004

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

EU No.	Brief Description
-004	<p>Emergency Standby Generator</p> <p>The standby generator's sole function is to supply electric power to the bio-solids facility during periods of power outages. The manufacture date (year) is 2008, the capacity is 805 HP, and the unit uses diesel as a fuel.</p>

B.1. Federal Requirements. The emission unit is subject to 40 CFR 60, Subpart IIII (Standards of Performance for Compression Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP Stationary Reciprocating Internal Combustion Engines). To meet the requirements of 40 CFR 63, Subpart ZZZZ, the unit only needs to meet the requirements of 40 CFR 60, Subpart IIII, because the unit is considered to be a new stationary RICE (as defined in 40 CFR 63, Subpart ZZZZ) at an area source (not a major source of HAPs) as indicated below:

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

[§ 63.6590(c)(1) of 40 CFR 63, Subpart ZZZZ]

To meet the requirements of 40 CFR 60, Subpart IIII, the unit must comply with the emission standards for new nonroad CI engines in §60.4202 of 40 CFR 60, Subpart IIII, for all pollutants, for the same model year and maximum engine power as indicated below:

Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

[§ 60.4205(b) of 40 CFR 60, Subpart IIII]

§60.4202 of 40 CFR 60, Subpart IIII is listed below:

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 004

- (1) For engines with a maximum engine power less than 37 KW (50 HP):
- (i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and
 - (ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.
- (2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.
- (1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.
- (c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.
- (d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
[§ 60.4202 of 40 CFR 60, Subpart IIII]

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 NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart AAAA – Municipal Solid Waste Facilities.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart WWW – Municipal Solid Waste Landfills.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.