Marion County Board of County Commissioners
Baseline Landfill Facility
Facility ID No.: 0830124
Marion County

Title V Air Operating Permit Revision

DRAFT/PROPOSED Permit No.: 0830124-009-AV
Revision to Title V Air Operation Permit No.: 0830124-007-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/893-3334
Fax: 850/412-0455

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Statement of Basis

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

Permittee: **DRAFT/PROPOSED Permit No.:** 0830124-009-AV
Marion Co. Board of Co. Commissioners **Facility ID No.:** 0830124
601 SE 25th Avenue **SIC Nos.:** 24, 2421
Ocala, FL 34471-2600 **Project:** Title V Air Operation Revision
Attention: Dr. Lee Niblock, County Administrator

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit, No. 0830124-006-AC, for reciprocating internal combustion engine/generator sets No. 1 and 2. This facility is located at 5601 SE 66th Street, Ocala, Marion County; UTM Coordinates: Zone 17, 397.7 km East and 3222.1 km North; Latitude: 29° 07' 30" North and Longitude: 82° 03' 45" West.

This Title V Air Operation Permit **Revision** 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 perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix A, Combined General Provisions (40 CFR Part 60, Subpart A for 40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart A for 40 CFR Part 63, Subpart AAAA)
Appendix B, Combined Standard Conditions (40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart AAAA); Appendix C, Standard Conditions (40 CFR Part 60, Subpart JJJJ)
Appendix D, Definitions for Subpart WWW – Municipal Solid Waste Landfills
Appendix E, 40 CFR Part 60 and Part 61 Subpart A, Flares, General Provisions
Appendix G–Alternate Operating Parameter Value for Specified Gas Extraction Wells
Appendix I-1, List of Insignificant Emission Units and/or Activities
Appendix TV-6, Title V Conditions; Tables 1, 2, and 3, Summaries of Requirements for MSWL

Effective Date: **TBD**
Renewal Application Due Date: **June 4, 2010**
Expiration Date: **January 15, 2011**

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____
Caroline D. Shine
Program Administrator
Air Resource Management

JR/jt

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of a municipal solid waste facility (landfill) with an active gas collection system. The collection system terminates in a candlestick flare destruction device or reciprocating internal combustion engine/generator sets No. 1 and No. 2. Also included in this permit are miscellaneous insignificant emission units and/or activities.

Based on the initial Title V Air Operation Permit application received March 12, 1997, this facility is **not** a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No./Brief Description

001 Municipal solid waste landfill with a candlestick flare
003 Reciprocating Internal Combustion Engine/Generator Set No. 1
004 Reciprocating Internal Combustion Engine/Generator Set No. 2

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit, however, are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/I.D. Number Changes
Statement of Basis

These documents are on file with permitting authority:
Initial Title V Air Operation Permit Application received March 12, 1997.
Additional information request dated May 7, 1997, and June 5, 1997.
Initial Title V Air Operation Permit issued December 10, 1997.
Title V Air Operation Permit Renewal Application received November 13, 2000.
Title V Air Operation Permit Renewal issued May 14, 2001.
Application for a combined air construction permit and Title V Air Operation Permit Revision received August 6, 2002
Additional information request dated August 27, 2002.
Title V Air Operation Permit Revision issued April 4, 2003.
Application for a Title V Air Operation Permit Renewal received July 5, 2005.
Application for a Title V Air Operation Permit Revision received May 8, 2009.
Application for a Title V Air Operation Permit Revision received October 8, 2009.
Additional information request dated November 11, 2009.

Subsection D. Miscellaneous.

The use of "Permitting Notes" throughout this permit are for informational purposes only and are not permit conditions.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, 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.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 10162
Fairfax, VA 22038
Telephone: 703/227-7650

b. The permittee shall 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]

5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

6. General Pollutant Emission Limiting Standards. 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 (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
Nothing was deemed necessary at this time.
[Rule 62-296.320(1)(a), F.A.C.]

7. Emissions of Unconfined Particulate Matter. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;

b. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne;

c. Landscaping or planting of vegetation; and

d. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.]

8. When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

9. The permittee shall submit all compliance related notifications and reports required of this permit to the air compliance section of this office:

Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/893-3336
Fax: 407/897-5963

10. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

11. Annual Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the air compliance section of this office and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]
{Permitting note: This condition implements the requirements of Rules 62-213.440(3)(a)2. &3., F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of

such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62.213.420(4), F.A.C.]

13. Annual Operating Report. The owner or operator shall complete DEP Form No. 62-210.900(5), F.A.C., "Annual Operating Report for Air Pollutant Emitting Facility," for each calendar year and submit it either electronically using the latest Department Annual Operating Report software or by hard copy to the air compliance section of this office **by April 1** of the following year in accordance with Rule 62-210.370(3), F.A.C. The emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for the purposes of the annual operating report.
[Rule 62-210.370(3), F.A.C.]

14. 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 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.]

15. At least 225 days prior to the expiration date of this operation permit, the permittee shall submit to this office, four copies of the air permit application, DEP Form No. 62-210.900(1).
[Rule 62-4.090(1), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

001 Municipal solid waste landfill with a candlestick flare

{Permitting Note: This emission unit is regulated under 40 CFR 60, Subpart WWW, NSPS for Municipal Solid Waste Landfills and 40 CFR 63, Subpart AAAA, NESHAP for Municipal Solid Waste Landfills, all adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A1. Permitted Capacity. The landfill gas collection system maximum flow rate is 2,500 scfm of gas.
[Rule 62-210.200(PTE), F.A.C.]

A2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A3. The visible emission limitation for the flares must comply with 40 CFR 60.18 (no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours).
[40 CFR 60.18(c)(1)]

Test Methods and Procedures

{Permitting Note: Table 3, Summary of Compliance Requirements for Municipal Solid Waste Landfills, summarizes information for convenience purposes only. This table does not supercede any of the terms or conditions of this permit.}

A4. The flare must be tested for visible emissions in accordance with EPA Method 22. The test shall last two hours. Testing shall be conducted annually.
[40 CFR 60.18(f)(1)]

A5. The flare control system shall be operated with a flame present at all times, as determined by a thermocouple or any other equivalent device to detect the presence of a flame. Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
[40 CFR 60.18(c)(2) and 40 CFR 60.18(d)]

A6. The permittee shall notify the Central District Office of the Department of Environmental Protection, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time and place of each such test, and the test contact person who will be responsible for coordinating and having such tests conducted for the owner or operator.
[Rule 62-297.310(7)(a)9., F.A.C.]

A7. The type of fuel and the heat input to this source must be entered on the visible emission test report.
[Rule 62-4.070(3), F.A.C.]

A8. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8)(b), F.A.C.]

NSPS and NESHAP Requirements

A9. The facility is subject to the applicable requirements of 40 CFR 60, Subpart A, General Provisions, 40 CFR 60, Subpart WWW, NSPS for Municipal Solid Waste Landfills and 40 CFR 63, Subpart AAAA, NESHAP for Municipal Solid Waste Landfills, adopted and incorporated by reference in Rule 62-204.800, F.A.C. (see attached Appendix A and Appendix B).

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No./ Brief Description

003 Reciprocating Internal Combustion Engine/Generator Set No. 1
004 Reciprocating Internal Combustion Engine/Generator Set No. 2

Each are spark ignition internal combustion engine/generator sets manufactured by Caterpillar, Model G3520C (2,233 hp and 1.6 MW each). The engines are fired by landfill gas only conveyed from the existing flare station through a treatment system that consists of compression, dehydrating, and filtering processes prior to being combusted in the engines. The existing flare will continue to operate to burn any excess landfill gas collected but not sent to the engines.

{Permitting Note: This emission unit is regulated under 40 CFR 60, Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B1. Permitted Capacity. Each engine will be fired with landfill gas only at a maximum 1.6 MW of electrical power.
[Rule 62-210.200(PTE), F.A.C. and permit 0830124-006-AC]

B2. Hours of Operation. There is no limitation on the annual hours of operation.
[Rule 62-210.200, (PTE), F.A.C. and permit 0830124-006-AC]

B3. Excess landfill gas not used as fuel in an engine must be flared in accordance with the requirements of 40 CFR Part 60, Subpart WWW.
[Rule 62-4.070, F.A.C.]

B4. No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly.
[Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

B5. Visible emissions from each source must comply with Rule 62-296.320(4)(b)1., F.A.C., and are limited to less than 20 percent opacity.

Test Methods and Procedures

B6. Each unit shall be tested for visible emissions in accordance with DEP Method 9 during each federal fiscal year (October 1 – September 30). The test period shall be 30 minutes.
[Rule 62-297.310(4)(a)2. and 62-297.310(7)(a)4.a., F.A.C]

B7. The permittee shall notify the Central District Office of the Department of Environmental Protection, at least 15 days prior to the date on which each formal compliance test is to begin, of

the date, time and place of each such test, and the test contact person who will be responsible for coordinating and having such tests conducted for the owner or operator.
[Rule 62-297.310(7)(a)9., F.A.C.]

B8. The type of fuel and the heat input to this source must be entered on the visible emission test report.
[Rule 62-4.070(3), F.A.C.]

B9. The required test report shall be filed with the Central District Office of the Department of Environmental Protection as soon as practical but no later than 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8)(b), F.A.C.]

B10. The permittee shall design each engine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit.
[Rule 62-297.310(6), F.A.C.]

B11. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. The maximum operating rate for each engine is 1.6 MW. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]

Recordkeeping and Document Submittal

B12. The owner or operator shall submit a copy of the compliance test results to the air compliance section of this office within 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8), F.A.C]

NSPS Requirements

B13. Each emission unit is subject to the applicable requirements of 40 CFR Part 60, Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines, adopted and incorporated by reference in Rule 62-204.800, F.A.C. (see attached Appendix C).